Meeting Date:	Title: (TO13-18) ORDINANCE TO CREATE	Agenda No.:	
	CHAPTER 35 "STORMWATER," ARTICLE I		
7-22-13	"STORMWATER MANAGEMENT" OF THE	10 (b) (2)	
	FALLS CHURCH CITY CODE TO CLARIFY		
	AND REORGANIZE EXISTING		
	STORMWATER MANAGEMENT		
	REGULATION; TO ADD NEW LANGUAGE		
	REQUIRED BY THE STATE OF VIRGINIA		
Proposed Motion: MOVE to adopt (TO13-18) on first reading refer to Planning			

Proposed Motion: MOVE to adopt (TO13-18) on first reading, refer to Planning Commission, Environmental Services Council and Tree Commission, schedule public hearing and second reading for October 28, 2013, and to advertise the same according to law.

Originating Dept. Head: Cindy Mester, Interim Director of Public Works 703.248.5042 CLM 7-17-13 Jason Widstrom, PE, City Engineer 70.248.5026 JW 7-17-13		Disposition by Council:
City Manager:	City Attorney:	CFO:
Wyatt Shields	John Foster	Richard La Condré
703.248.5004	703.248.5010	703.248.5092
FWS 7-18-13	IEF 7-18-13	RAL 7-18-13

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6 7 **REQUEST:** The City Council is requested to adopt an ordinance that will establish new, stricter stormwater run-off regulations, as mandated by the Commonwealth of Virginia. The proposed ordinance (TO13-18) is before Council on first reading, for referral to city boards and commissions (Planning Commission, Environmental Services Council, Tree Commission). Second reading, public hearing, and final adoption scheduled for October 28, 2013.

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**RECOMMENDATION:** Staff recommends approval of the motion.

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**BACKGROUND:** The Virginia General Assembly has mandated that all local governments adopt new stormwater regulations to reduce the amount of "non-point source" pollution and water volume flowing to the Chesapeake Bay. The City must adopt new regulations by April, 2014.

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The proposed Stormwater Ordinance (TO13-18) was developed in conjunction with our

- stormwater policy consultant David Bulova with AMEC and has been reviewed by the City
- 19 Attorney. The ordinance has also had a precursory review by Virginia Department of
- 20 Environmental Quality (DEQ) staff. City Council discussed this at work session on July 15, 2013
- 21 and concurred with proceeding with first reading and seeking boards and commissions as well as
- 22 community input. A PowerPoint presentation was also given at the meeting and a copy is
- 23 available on Granicus here:
- $24 \qquad http://www.fallschurchva.gov/content/government/council/meetingwebcastgranicus.aspx$

TO13-18 accomplishes four key tasks, which are provided here in outline format and discussed in greater detail below:

- 1. Reorganization of existing stormwater management regulations
- 2. Adoption of new, State-mandated stormwater development criteria
  - a. New water quality standards
  - b. New water quantity standards
  - c. Grandfathering

- 3. Adoption of new, State-mandated Virginia Stormwater Management Program General Permit for Discharges of Stormwater from Construction Activities requirements and fee structure
- 4. Clarification of existing illicit discharge regulations

# Reorganization of existing stormwater management regulations

Staff is seeking to create Chapter 35, Stormwater, Article I, Stormwater Management, to reorganize existing City Code found in Chapter 14, Environment, Article IV, Erosion and Sediment Control and in Chapter 48, Zoning, Article IV, Districts, Division 16, CBPA, Chesapeake Bay Preservation Area Overlay District. This effort will streamline existing City Code by creating a one-stop-shop for stormwater development criteria. TO13-18 places existing stormwater regulations under a single umbrella that will be managed by the Department of Public Works with a singular Stormwater Management Permit instead of several discrete portions of City Code. These changes will give developers a clear and concise understanding of the City's stormwater requirements and a clear path to follow. DEQ has viewed the City's proposed "all-in-one" ordinance as a model for other jurisdictions and would like to post on their website as an example.

At this time Staff is seeking broad public input on the changes proposed. The City Arborist provided an advanced copy to the Tree Commission and they are considering additional consolidation of landscaping/tree canopy requirements under Chapter 35 with intent to have additional code efficiency and enhancements prior to 1<sup>st</sup> reading. Staff is currently working with AMEC to address these potential changes.

Given the scope of the Stormwater Management Permit, the Chesapeake Bay Review Team (CBIRT) will be replaced with the Stormwater Management Review Team (SMRT) since its mission now encompasses reviewing more than just items under the Chesapeake Bay Preservation Area Overlay District. SMRT will meet in the same way that the CBIRT meets currently but with added flexibility to review any application for a Stormwater Management Permit. Like CBIRT, SMRT meetings will be advertised and open to the public to allow for public input in stormwater management issues related to development. SMRT also becomes advisory to the Director of Public Works. Previously, the CBIRT had the authority to approve or reject plans. Since the CBIRT is comprised of several members, this could create confusion in the permit approval process. The new language clarifies that the Director of Public Works makes the final decision on the advice of the SMRT.

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New water quality standards

In addition to the reorganization of existing code, staff is seeking to update stormwater development criteria with new, state-mandated standards that must be adopted by every jurisdiction in Virginia by April 1, 2014 with a go-live date of July 1, 2014. The City will also need to provide a final draft to the Virginia Department of Environmental Quality (DEQ) for review no later than December 15, 2013. The tougher standards outlined herein stem from Virginia's efforts to restore water quality to the Chesapeake Bay. A summary of the changes is provided below in tabular form.

Adoption of new, State-mandated stormwater development criteria

# Table 1. Water Quality Standards for Davidanment and Redavidanment in Falls Church

Table 1. Water Quality	Standards for Developm	ent and Redevelopment if	n Fails Church
	Existing	State standard	Proposed
New development of single-family home (e.g. vacant lot)	35% cap on impervious coverage (approximates to 1.50 lbs of Phosphorus per acre)	0.41 lbs of Phosphorus per acre; State regulations provide local option to exempt single-family homes that disturb less than one acre	0.41 lbs of Phosphorus per acre <sup>1</sup>
Redevelopment of single-family home (e.g. addition, tear down)	35% cap on impervious coverage (approximates to 1.50 lbs of Phosphorus per acre)	20% reduction if land disturbance is one acre or greater and 10% reduction if land disturbance is less than one acre; reduction cannot exceed 0.41 lbs of Phosphorus per acre; State regulations provide local option to exempt single-family homes that disturb less than one acre	0.41 lbs of Phosphorus per acre <sup>1</sup>
Any development NOT single-family home	If 50% or less impervious coverage, then meet existing pollution load; If greater than 50% impervious coverage, then reduce existing pollution loading by 10%	New Development 0.41 lbs of Phosphorus per acre  Redevelopment 20% reduction if land disturbance is one acre or greater and 10% reduction if land disturbance is less than one acre; reduction cannot exceed 0.41 lbs of Phosphorus per acre	New Development 0.41 lbs of Phosphorus per acre  Redevelopment 20% reduction if land disturbance is one acre or greater and 10% reduction if land disturbance is less than one acre; reduction cannot exceed 0.41 lbs of Phosphorus per acre

Proposed standard eliminates 35% cap on impervious coverage found in Chapter 48, "Zoning." See below for further discussion.

The proposed water quality criterion is based on a numerical standard of pounds of Phosphorus generated by a given site on an annual basis. 20% reduction for redevelopment (10% for redevelopment less than one acre) and 0.41 pounds per acre for new development standards are required by Virginia law. The required language is a shift away from the City's past history of using impervious coverage as a surrogate for Phosphorus. The proposed standards will be calculated using Virginia's Runoff Reduction Method.

The major issue for City Council to consider is how best to treat new development and redevelopment of single-family homes. The state regulations allow the City to exempt single-family homes under one acre from the water quality criteria. However, any new development that is not controlled will result in an additional Phosphorus load that will add to the City's retrofit obligations under the Chesapeake Bay Total Maximum Daily Load (TMDL). As a result, Staff is recommending that new single-family homes not be exempt from the water quality requirements.

In addition, Staff is recommending a more stringent standard for single-family home redevelopment where the entire house is being demolished and rebuilt relative to the minimum state requirement. The state law allows teardowns to be treated as a redevelopment (percentage reduction in Phosphorus required); the proposed ordinance would treat teardowns similarly to new development on an empty lot, which has more stringent standards (0.41 lbs of Phosphorus per year). Should the City Council wish to adopt the more stringent standard for single-family home tear downs and rebuilds, Staff would need to provide defensible justification before the Virginia Soil and Water Conservation Board using criteria outlined in the Code of Virginia.

The impact of tightening water quality standards on development is difficult to predict. Based on Staff's discussions with the development community, most single-family development will spend between \$7,000 - \$10,000 to install a water treatment facility, commonly known as a "Best Management Practice" (e.g. rain garden, cistern, infiltration trench), in order to meet the 0.41 standard while maintaining the building footprint commonly seen today. There is variability in cost because the size of a water treatment facility is a function of the amount of impervious coverage on a project. The more impervious cover, the more Phosphorus generated, the larger the facility must be to treat stormwater runoff to an acceptable level. This is especially true for large commercial properties with impervious coverage in the 80-90% range. Since the standards must be implemented statewide the changes are not anticipated to put development in the City of Falls Church at a competitive disadvantage with surrounding jurisdictions.

Department of Public Works (DPW) staff recognizes the proposed reorganization of City Code and corresponding update to development criteria eliminates the 35% cap on impervious cover that is currently part of the Chesapeake Bay Performance Criteria found in the Chapter 48, Zoning. Department of Development Services staff is aware of this issue and is proposing a separate modification to the zoning ordinance for City Council to consider concurrently.

It is important to note that the Chesapeake Bay model, which was used to determine the City's required pollution removal targets (for the Chesapeake Bay TMDL) is based on a snapshot taken in 2009. Since development permitted under the current standards allowed for an increase in pollutants for single-family homes, the City will need to offset those increases from developments approved after July 1, 2009 until the new, stricter requirements take effect July 1, 2014.

*New water quantity standards* 

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The new State regulations for water quantity control are designed to replace Minimum Standard 19 from the Virginia Erosion and Sediment Control Regulations. As a result, the water quantity control standards previously contained in Chapter 14, Environment, Article IV, Erosion and Sediment Control have been deleted and replaced with the controls from the Virginia Stormwater Management Regulations. New water quantity requirements are designed to protect downstream properties and waterways from damage caused by increased volume and peak flow rate of stormwater as a result of development. Under the new requirements, stream channel protection criteria and flood protection criteria are now situational. Stream channel protection requirements will depend on whether the receiving channel is manmade, modified natural, or natural. Flood protection will depend on whether or not there is existing localized flooding. The general concept of the new requirements is to encourage a reduction in stormwater volume through the use of on-site infiltration techniques, with the peak flow of the stormwater that discharges from the site to be controlled through on-site detention. The channel protection measures have been established to

prevent channel erosion from increased flow of stormwater. The flood protection measures will

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154 ensure that downstream conveyances will not be flooded. For areas with existing localized 155

flooding issues, development must decrease flow rates from the existing condition or upgrade the

channel to accommodate the additional flows.

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In addition to the new state minimum standards, the ordinance will continue to implement specific post-development peak runoff requirements as required for the Four Mile Run Flood Control Channel per the City's contract with the United States Army Corps of Engineers.

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**Grandfathering** 

The proposed ordinance relies on state grandfathering language found in 4VAC50-60-48. It states projects with "any land-disturbing activity for which a currently valid proffered or conditional zoning plan, preliminary or final subdivision plat, preliminary or final site plan or zoning with a plan of development, or any document determined by the locality as being equivalent thereto" approved by the City before July 1, 2014 are grandfathered under existing stormwater standards. Grandfathered projects must complete construction by June 30, 2019 otherwise unfinished portions will be subject to the new standards.

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# Virginia Stormwater Management Program General Permit

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Starting July 1, 2014 City staff will be required by DEQ to administer, review, and oversee the issuance of the Virginia Stormwater Management Program (VSMP) General Permit for Discharges of Stormwater from Construction Activities for development sites with land disturbance of one acre or more. DEQ is the current permitting authority. This responsibility includes enforcement of Storm Water Pollution Prevention Plans (SWPPPs) for these same land disturbing activities. While this is a new duty for DPW many of the elements contained within a SWPPP are already reviewed as part of the City's site plan process. The change will eliminate duplicative efforts between the City and DEQ and helps streamline stormwater management permitting. The language included in TO13-18 outlines SWPPP requirements and the State-

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recommended fees associated with issuance and maintenance of permits. DEO will no longer

184 review local applications, however they will continue to oversee the program at a high level with 185 the potential for periodic site inspections. It is for this reason that 28% of the fee is remitted to 186 DEQ for administrating the overall program. If the fee set in the State regulations does not meet 187 the goals of the City with respect to cost recovery, the City can request an increase from the 188 Virginia Soil and Water Conservation Board. This will require specific justification and approval by the Board. DEQ's share will not exceed 28% of the fee in the State regulations. 189 190

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# Clarification of existing illicit discharge regulations

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Clarification and enhancement of the City's illicit discharge regulations was identified as a top priority in Chapter 3 of the Watershed Management Plan. The City currently relies on relatively weak authority under Chapter 34, "Solid Waste." TO13-18 provides clear authority and definition of what constitutes an illicit discharge. The enhancement of penalties for dumping and illicit discharges are contained within the most recent fee adjustments (set to \$500 for residential and \$1,000 for commercial).

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# **Policy concerns for consideration**

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In summary, while many aspects of the proposed stormwater management regulations are mandatory there are two that City Council has the flexibility to modify. They are as follows:

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• Staff's proposal to adopt the 0.41 lbs. of Phosphorus per year for all single-family development. Council has the option to exempt single-family homes under one-acre from stormwater quality criteria.

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The proposed ordinance uses the state's grandfathering language, which sets the date for grandfathering to July 1, 2014. Council has the option to move this date forward. The earliest date would be the date the new ordinance is adopted.

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Council is seeking boards and commission as well as community input on these two policy questions.

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**FISCAL IMPACT:** Establishing this ordinance will provide for cost recovery of administering VSMP General Permit for Discharges of Stormwater from Construction Activities. Approximately \$11,200 in fees annually [assuming 2 large permits (< 5 acres) and 20 small permits a year (< 1 acre)].

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**TIMING:** Immediate. Provides streamlined City Code and clarification to illicit discharges.

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**ATTACHMENTS:** 1) Proposed Chapter 35, "Stormwater"

222 223 2) Revised Chapter 48, Article IV, Division 16 "CBPA, Chesapeake Bay 224 Preservation Overlay District" (starts line 2009)

3) Revised Chapter 14, Article IV, "Erosion and Sediment Control"

(starts line 2892)

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[ATTACHMENT 1]

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231		(TO13-018)		
232	ORD	DALLIGE TO ODE LITE CHARTED AS WORDDAY A TERM IN A DITIGUE.		
233 234		ORDINANCE TO CREATE CHAPTER 35 "STORMWATER," ARTICLE I "STORMWATER MANAGEMENT" OF THE FALLS CHURCH CITY CODE TO		
234 235		CLARIFY AND REORGANIZE EXISTING STORMWATER DEVELOPMENT		
236		ERIA; TO ADD NEW LANGUAGE REQUIRED BY THE STATE OF		
237		SINIA.		
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239		THE CITY OF FALLS CHURCH, VIRGINIA, HEREBY ORDAINS THAT Chapter 14,		
240 241		cle IV "Erosion and Sediment Control" and Chapter 48, Article IV, Division 16 "CBPA, sapeake Bay Preservation Overlay District" be struck and replaced with the following new		
242		Chapter 35 below.		
243	Chapter 35 of			
244		Chapter 35		
245		STORMWATER		
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247		ference – Power to make regulations for the preservation of the safety, health, peace,		
248	good order, c	omfort, convenience, morals, and welfare of the city and its inhabitants, §2.04.		
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250		State Law reference – State Water Control Law, Code of Virginia, §62.1-44.15:67 et seq.;		
251 252	_	mwater Management Act, Code of Virginia, §10.1-603.2 et seq.; Erosion and ntrol Act, Code of Virginia, §10.1-560 et seq.; Flood Damage Reduction Act,		
253	§10.1-600 et			
254	v	•		
255		ARTICLE I. STORMWATER MANAGEMENT		
256				
257	Sec. 35-88	Purpose and authority.		
258	Sec. 35-89	Definitions.		
259	Sec. 35-90	Administration; context of zoning and subdivision ordinances.		
260	Sec. 35-91	Stormwater management permit required; exemptions.		
261	Sec. 35-92	Stormwater management plan.		
262	Sec. 35-93	Stormwater management technical standards.		
263	Sec. 35-94	Stormwater management plan review.		
264	Sec. 35-95	Stormwater pollution prevention plan.		
265	Sec. 35-96	Pollution prevention plan.		
266	Sec. 35-97	Chesapeake Bay preservation areas established.		
267	Sec. 35-98	Chesapeake Bay preservation areas; administrative waivers,		
268		nonconformities, exemptions, and exceptions.		
269	Sec. 35-99	Water quality impact assessment.		
270	Sec. 35-100	Water quality impact assessment review.		

- 271 Sec. 35-101 Erosion and sediment control plan.
- 272 Sec. 35-102 Erosion and sediment control technical standards.
- 273 Sec. 35-103 Erosion and sediment control plan review.
- 274 Sec. 35-104 Landscape conservation plan.
- 275 Sec. 35-105 Bonding requirements; installation and maintenance agreement.
- 276 Sec. 35-106 Appeals and hearings.
- 277 Sec. 35-107 Monitoring and inspections.
- 278 Sec. 35-108 Prohibition against illicit discharges.
- 279 Sec. 35-109 Failure to comply; penalties and other legal actions.
- 280 **Sec. 35-110 Fees**

- 282 Sec. 35-88. Purpose and authority.
- The purpose of this article is to ensure that land is used, developed, and redeveloped in a manner
- that protects water quality and to prevent the degradation of properties, stream channels, waters,
- and other natural resources by prohibiting illicit discharges and providing that adequate
- stormwater management and erosion and sediment control measures are taken before, during,
- and after the period of land disturbance, development, and construction.
- This article is adopted pursuant to the authority of the State Water Control Law (§62.1-44.15:67
- et seq., Code of Virginia), the Virginia Stormwater Management Act (§10.1-603.2 et seq., Code
- of Virginia), the Erosion and Sediment Control Act (§10.1-560 et seq., Code of Virginia), and
- their attendant regulations.
- In any case where the requirements of this article conflict with any other provision of this Code
- or existing state or federal regulations, whichever imposes the more stringent restrictions shall
- apply.

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#### Sec. 35-89. Definitions.

- As used in this article, unless the context clearly indicates otherwise, the following words and
- 298 phrases shall have the meanings ascribed to them by this section:
- 299 Adequate channel means a watercourse that will convey a chosen frequency storm event without
- overtopping its banks or causing erosive damage to the bed, banks, and overbank sections of the
- 301 same.
- 302 Agreement in lieu of a plan means a contract between the city and the owner that specifies
- erosion and sediment control measures and other conservation measures that must be
- implemented in the construction of a single-family residence in lieu of a formal site plan or a
- water quality impact assessment.
- 306 Applicant means any person submitting an application for a stormwater management permit,
- requesting issuance of a permit, or requesting an exemption or exception from the requirements
- 308 under this article.
- 309 Best management practice or BMP means schedules of activities, prohibitions of practices,
- maintenance procedures, and other management practices, including both structural and

- 311 nonstructural practices, to prevent or reduce the pollution of surface waters and groundwater
- 312 systems from the impacts of land disturbing activities. BMPs also include treatment
- requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge
- or waste disposal, or drainage from raw materials storage.
- 315 Board or VSWCB refers to the Virginia Soil and Water Conservation Board.
- 316 Buffer area means an area of natural or established vegetation managed to protect other
- components of a resource protection area and state waters from significant degradation due to
- 318 land disturbances.
- 319 Chesapeake Bay preservation area or CBPA means any land designated by the city pursuant to
- 320 the Chesapeake Bay Preservation Area Designation and Management Regulations, 4VAC50-90-
- 321 70 et seq., and the Chesapeake Bay Preservation Act, section 62.1-44.15:74. A Chesapeake Bay
- preservation area shall consist of a resource protection area and a resource management area.
- 323 Clean Water Act or CWA means the federal Clean Water Act (33USC §1251 et seq.) formerly
- referred to as the Federal Water Pollution Control Act or Federal Water pollution Control Act
- 325 Amendments of 1972, Public Law 92-500, as amended by Public Law 95-217, Public Law 95-
- 576, Public Law 96-483, and Public Law 97-117, or any subsequent revisions thereto.
- 327 Common plan of development or sale means a contiguous area where separate and distinct
- 328 construction activities may be taking place at different times on different schedules. Separate
- land disturbing activities that take place on a single property that cumulatively exceed 2,500
- square feet within a three year period shall be considered a common plan of development for the
- 331 purposes of this article.
- 332 Control measure means any best management practice or stormwater facility, or other method
- used to prevent or reduce the discharge of pollutants to state waters.
- 334 Critical root zone or CRZ means the area beneath a tree that may extend well beyond the spread
- of its branches. The size of the critical root zone is a function of tree type, size, health and it's
- response to construction stresses. The size of the critical root zone should be adjusted according
- to the specific factors listed in this definition and site conditions, but generally can be calculated
- as one foot per inch of diameter at breast height (DBH) of the tree to be preserved. For example,
- a ten-inch diameter at breast height tree would have a critical root zone of ten feet from the tree
- trunk in all directions.
- 341 Dam means a barrier to confine or raise water for storage or diversion, to create a hydraulic head,
- to prevent gully erosion, or to retain soil, rock or other debris.
- 343 Denuded refers to a term applied to land that has been physically disturbed and no longer
- 344 supports vegetative cover.
- 345 Department refers to the Virginia Department of Environmental Quality.
- 346 Development means land disturbance and the resulting landform associated with the construction
- of residential, commercial, industrial, institutional, recreation, transportation, or utility facilities
- or structures, or the clearing of land for non-agricultural or non-silvicultural purposes.
- 349 Diameter at breast height or DBH means the diameter of the tree measured outside the bark at a
- point four feet above the ground.
- 351 Dike means an embankment to confine or control water, especially one built along the banks of a
- river to prevent overflow of lowlands; a levee.

- 353 Director means the director of public works or his designee and is the representative of the city
- who has been appointed to serve as the agent of the city in administering this article.
- 355 Discharge means to dispose, deposit, spill, pour, inject, dump, leak, or place by any means, or
- that which is disposed, deposited, spilled, poured, injected, dumped, leaked, or placed by any
- 357 means.
- 358 Disturbed acreage means that portion of the project that will be disturbed, denuded, graded, cut,
- or filled.
- 360 Diversion means a channel with a supporting ridge on the lower side constructed across or at the
- bottom of a slope for the purpose of intercepting surface runoff.
- 362 Dripline means a vertical projection to the ground surface from the furthest lateral extent of a
- tree or shrub's canopy.
- 364 Erosion impact area means an area of land not associated with current land disturbing activity
- but subject to persistent soil erosion resulting in the delivery of sediment onto neighboring
- properties or into state waters. This definition shall not apply to any lot or parcel of land of
- 367 10,000 square feet or less used for residential purposes or to shorelines where the erosion results
- 368 from wave action or other coastal processes.
- 369 General permit means the Virginia Stormwater Management Program General Permit for
- 370 Discharges of Stormwater from Construction Activities found at 4VAC50-60-1170 authorizing a
- category of discharges under the CWA within a geographical area of the Commonwealth of
- 372 Virginia.
- 373 Impervious land cover means a surface composed of any material that significantly impedes or
- prevents natural infiltration of water into the soil. Impervious surfaces include, but are not
- limited to: nonvegetated roofs; buildings; streets; parking areas; sidewalks; driveways;
- 376 swimming pools; recreational surfaces such as tennis courts or basketball courts; and, any
- 377 concrete, asphalt, or compacted gravel surface.
- 378 *Illicit discharge* means any discharge to the stormwater management system that is not
- composed entirely of stormwater, except discharges pursuant to a VPDES or VSMP permit,
- discharges resulting from firefighting activities, or discharges expressly allowed under this
- article. Prohibited substances, whether liquid or solid, include, but are not limited to: waste,
- trash, and garbage; food and kitchen waste; leakage from dumpsters or trash containers; gasoline,
- waste oil, lubricants, grease, antifreeze, or any other automotive, motor, or equipment fluids;
- fertilizers, grass clippings, mulch, and any yard waste; any chemical or solvent; soluble and non-
- soluble metals; wash water, detergents, and cleaning agents; paints; plastics; soot, ash, and
- sludge; animal waste; eroded soils and sediment; carcasses; chlorinated swimming pool water;
- and, any material that impedes or interferes with the free flow of stormwater.
- 388 Land disturbing activity means a manmade change to the land surface that potentially changes its
- runoff characteristics including any clearing, grading, or excavation except that the term shall not
- include those exemptions specified in section 35-91.
- 391 Layout means a conceptual drawing sufficient to provide for the specified stormwater
- management facilities required at the time of approval.
- 393 Linear development project means a land disturbing activity that is linear in nature such as, but
- not limited to: the construction of electric and telephone utility lines, and natural gas pipelines;
- 395 construction of tracks, rights-of-way, bridges, communication facilities and other related

- 396 structures of a railroad company; highway construction projects; construction of stormwater
- 397 channels and stream restoration activities; and, water and sewer lines. Private subdivision roads
- or streets shall not be considered linear development projects.
- 399 *Minor modification* means an amendment to an existing permit before its expiration not requiring
- 400 extensive review and evaluation including but not limited to changes in EPA promulgated test
- 401 protocols, increasing monitoring frequency requirements, changes in sampling locations, and
- 402 changes to compliance dates within the overall compliance schedules. A minor permit
- 403 modification or amendment does not substantially alter permit conditions, substantially increase
- or decrease the amount of surface water impacts, increase the size of the operation, or reduce the
- capacity of the facility to protect human health or the environment.
- 406 Natural channel design concepts means the utilization of engineering analysis and fluvial
- 407 geomorphic processes to create, rehabilitate, restore or stabilize an open conveyance system for
- 408 the purpose of creating or recreating a stream that conveys its bankfull storm event within its
- banks and allows larger flows to access its bankfull bench and its floodplain.
- Natural stream means nontidal waterways that are part of the natural topography. Natural
- 411 streams usually maintain a continuous or seasonal flow during the year and are characterized as
- being irregular in cross section with a meandering course. Constructed channels such as drainage
- ditches or swales are not to be considered as natural streams.
- Nonpoint source pollution means pollution consisting of constituents such as sediment, nutrients,
- and organic and toxic substances from diffuse sources, such as runoff from agriculture and urban
- 416 land development and use.
- Nontidal wetlands means those wetlands, other than tidal wetlands, that are inundated or
- saturated by surface water or groundwater at a frequency and duration sufficient to support, and
- 419 that under normal circumstances do support a prevalence of vegetation typically adapted for life
- 420 in saturated soil conditions, as defined by the U.S. Environmental Protection Agency, pursuant to
- section 404 of the Federal Clean Water Act, in 33 CFR 328.3b.
- 422 Operator means the owner or operator of any facility or activity subject to regulation under this
- 423 article.
- 424 Owner means the owner of the freehold of the premises or lesser estate therein, a mortgagee or
- vendee in possession, assignee of rents, receiver, executor, trustee, lessee or other person, firm or
- 426 corporation in control of a property.
- 427 Peak flow rate means the maximum instantaneous flow from a given storm condition at a
- 428 particular location.
- 429 *Person* means any individual, partnership, firm, association, joint venture, public or private
- corporation, trust, estate, commission, board, public or private institution, utility, cooperative,
- county, city, town, or other political subdivision of the commonwealth, any interstate body, or
- any legal entity.
- 433 Pervious land cover means a surface composed of any material that allows for natural infiltration
- of water into the soil in varying degrees.
- 435 Pre-development conditions refers to conditions at the time an applicant becomes subject to the
- provisions of this article. Where phased development or plan approval occurs (preliminary
- grading, roads and utilities, etc.), the existing conditions at the time the applicant first becomes
- subject to the provisions of this article shall establish pre-development conditions.

- 439 Public road means a publicly owned road designed and constructed in accordance with water
- quality protection criteria at least as stringent as requirements applicable to the Virginia
- Department of Transportation, including regulations promulgated pursuant to the Chesapeake
- Bay Preservation Act (§10.1-2100 et seq., Code of Virginia), the Virginia Stormwater
- 443 Management Act (§10.1-603.2 et seq., Code of Virginia), the Virginia Erosion and Sediment
- 444 Control Act (§10.1-561 et seq., Code of Virginia), and their attendant regulations. This
- definition includes those roads where the Virginia Department of Transportation exercises direct
- supervision over the design or construction activities, or both, and cases where secondary roads
- are constructed or maintained, or both, by a local government in accordance with the standards
- of that local government.
- 449 Redevelopment means the process of developing land that is developed or has been previously
- 450 developed.
- 451 Responsible land disturber means an individual from the project or development team, who will
- be in charge of an responsible for carrying out a land-disturbing activity covered by an approved
- plan or agreement in lieu of a plan who (a) holds a Responsible Land Disturber certificate of
- competence (b) holds a current certificate of competence from the Board in the areas of
- Combined Administration, Inspection, or Plan Review (c) holds a current Contractor certificate
- of competence for erosion and sediment control or (d) is licensed in Virginia as a professional
- engineer, architect, certified landscape architect or land surveyor pursuant to Article 1 (§54.1-
- 458 400 et seq.) of Chapter 4 of Title 54.1 of the Code of Virginia.
- 459 Resource management area or RMA means that component of the Chesapeake Bay preservation
- area that is not classified as the resource protection area. The term resource management area
- includes land types that, if improperly used or developed, have the potential for causing
- significant water quality degradation or for diminishing the functional value of the resource
- 463 protection area.
- 464 Resource protection area or RPA means that component of the Chesapeake Bay preservation
- area as defined in section 35-97(b). Resource protection areas consist of sensitive lands that have
- an intrinsic water quality value due to the ecological and biological processes they perform or are
- sensitive to impacts which may result in significant degradation to the quality of state waters.
- 468 Riparian Buffers Modification and Mitigation Guidance Manual means the Riparian Buffers
- 469 Modification and Mitigation Guidance Manual, published in September 2003, written and
- 470 published by the Chesapeake Bay Local Assistance Department, now the Virginia Department of
- Environmental Quality. The intent of the manual is to provide guidance and clarification for
- 472 tidewater local governments, at their request, regarding the section of the Chesapeake Bay
- 473 Preservation Act describing buffer exemptions and modifications.
- 474 Runoff volume means the volume of water that runs off the land development project from a
- prescribed storm event.
- 476 Sediment basin means a depression formed from the construction of a barrier or dam built to
- 477 retain sediment and debris.
- 478 Shrub means any self-supporting woody plant which usually has multiple trunks. For
- preservation and canopy coverage calculation purposes, a shrub shall measure no less than five
- 480 feet in height above ground level.

- 481 Site means the land or water area where any facility or activity is physically located or
- conducted, a parcel of land being developed, or a designated area of a parcel in which the land
- development project is located.
- 484 Stabilized means an area that can be expected to withstand normal exposure to atmospheric
- 485 conditions without incurring erosion damage.
- 486 State means the Commonwealth of Virginia.
- 487 State Water Control Law means Chapter 3.1 (§62.1-44.2 et seq.) of Title 62.1 of the Code of
- 488 Virginia.
- 489 State waters means all waters on the surface and under the ground wholly or partially within or
- bordering the Commonwealth of Virginia or within its jurisdiction, including wetlands.
- 491 Stormwater means precipitation that is discharged across the land surface through conveyances
- 492 to one or more waterways and that may include stormwater runoff, snow melt runoff, and surface
- 493 runoff and drainage.
- 494 Stormwater detention means the process of temporarily impounding runoff to reduce flood
- 495 peaks.
- 496 Stormwater management review team or SMRT means a team composed of city staff, to include
- but not be limited to the director, a senior or principal planner from the development services
- department, the city engineer, and the city arborist.
- 499 Stormwater management system means the series of structural and nonstructural stormwater
- infrastructure established to manage the quantity and/or quality of stormwater runoff. The
- stormwater management system includes, but is not limited to, storm drains, catch-basins, inlets,
- 502 pipes, open channels and ditches, facilities designed to control stormwater volume and velocity,
- and various best management practices designed to reduce stormwater pollution.
- 504 Stormwater Pollution Prevention Plan or SWPPP means a document that is prepared in
- accordance with good engineering practices that identifies potential sources of pollution that may
- reasonably be expected to affect the quality of stormwater discharges from the construction site
- and otherwise meets the requirements of this article. In addition, the document shall identify and
- require the implementation of control measures, and shall include, but not be limited to the
- inclusion of, or the incorporation by reference of, an approved erosion and sediment control plan.
- and approved stormwater management plan, and a pollution prevention plan.
- 511 Stormwater retention means the process by which an impoundment structure stores the total
- runoff of a given storm and then releases the flow at a controlled rate over an extended period.
- 513 Subdivision means the same as defined in section 38-1.
- 514 Substantial alteration means the expansion or modification of a building or development that
- would result in a disturbance of land exceeding an area of 2,500 square feet in the resource
- 516 management area only.
- 517 Total Maximum Daily Load, or TMDL, means the sum of the individual wasteload allocations for
- 518 point sources, load allocations for nonpoint sources, natural background loadings and a margin
- of safety. TMDLs can be expressed in terms of either mass per time, toxicity, or other
- appropriate measure. The TMDL process provides for point versus nonpoint source trade-offs.
- 521 Tree means any self-supporting woody plant which usually provides one main trunk and
- 522 produces a more or less distinct and elevated head with many branches. For preservation

- 523 purposes and canopy coverage calculation purposes, a tree shall measure no less than two inches
- 524 in DBH.
- 525 Tree canopy means the branches, leaves, or other foliage from any tree measuring no less than
- two inches in DBH and shrubs measuring no less than five feet in height.
- 527 Tree canopy coverage means the area surrounding a tree or shrub located within the dripline.
- 528 Use means an activity on the land other than development including, but not limited to,
- 529 commercial, residential, and industrial.
- 530 Virginia Stormwater Management Act means Article 1.1 (§10.1-603.1 et seq.) of Chapter 6 of
- Title 10.1 of the Code of Virginia.
- Virginia Stormwater BMP Clearninghouse means a website of the same name that contains
- detailed design standards and specifications for control measures that may be used in the
- 534 Commonwealth of Virginia to comply with the requirements of the Virginia Stormwater
- Management Act and associated regulations.
- Water-dependent facility means a development of land that cannot exist outside of the resource
- protection area and must be located on the shoreline by reason of the intrinsic nature of its
- operation. The term water-dependent facilities includes, but is not limited to, the intake and
- outfall structures of water and sewer treatment plants and storm sewers, and public water
- oriented recreation areas.
- Water quality volume means the volume equal to the first one-half inch of runoff multiplied by
- the impervious surface of the land development project.
- 543 *Woody vegetation* means and includes all trees and shrubs.

# Sec. 35-90. Administration; context of zoning and subdivision ordinances.

- 546 (a) The director is charged with responsibility for the administration of this article unless the
- context clearly indicates otherwise. The director, at his or her discretion, may delegate authority
- 548 to implement all, or specific parts, of this article.
- 549 (b) The stormwater management review team shall make a recommendation to approve, approve
- subject to conditions, or disapprove any land disturbing activity that is subject to this article and
- shall provide their findings to the director. Meetings of the SMRT will be advertised in
- 552 compliance with applicable provisions of the Virginia Freedom of Information Act (§2.2-3700 et
- seq., Code of Virginia). Public comment will be received at such meetings and outside of these
- meetings in writing. Property owners within 150 feet of land disturbing activities that are the
- subject to review under this article will be mailed notification of applicable SMRT meetings at
- least 10 days prior to the meeting date.
- 557 (c) Administration of the site plan process shall be in accordance with article V, division 7 of this
- chapter, pertaining to site plans, or chapter 38, pertaining to subdivision.
- (d) Permitted uses, conditional uses, special use permits, accessory uses, and special
- requirements shall be as established by the underlying zoning district, unless specifically
- modified or superseded by the requirements set forth in this article.
- (e) Lot size shall be subject to the requirements of the underlying zoning district, provided that
- any lot shall have sufficient area outside the resource protection area established under this

article to accommodate an intended development, in accordance with the criteria in section 35-97, when such development is not otherwise prohibited in the RPA.

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# Sec. 35-91. Stormwater management permit required; exemptions.

- 568 (a) Stormwater management permit required. Except as provided herein, no person may engage
- in any land disturbing activity, nor may any grading, building, or other permits for activities
- involving land disturbing activities be issued, until a stormwater management permit has been
- issued by the director in accordance with the requirements set forth in this article.
- 572 (b) Conditions of permit issuance. No stormwater management permit shall be issued by the
- director until the following have been submitted to and approved by the director as prescribed
- 574 herein:

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- (1) A site plan in accordance with the provisions of this article and chapter 48 and, if applicable a subdivision plan in accordance with the provision of this article and chapter 38.
- 577 (2) A general permit registration statement and evidence of general permit coverage.
- 578 (3) A stormwater management plan in accordance with section 35-92.
- 579 (4) An erosion and sediment control plan in accordance with section 35-101.
- (5) A landscape conservation plan in accordance with section 35-104.
- 581 (6) For all development, redevelopment, or other land disturbing activity within an RPA, or within an environmentally sensitive area as determined by the director, or for an exception under section 35-98, a water quality impact assessment in accordance with section 35-99.
- 584 (c) Relationship to floodplains. Approval of a stormwater management permit shall not be
- construed to authorize the construction of any structure within the floodplain or to authorize any
- filling, grading or other change of the contour of such floodplain area without such permit,
- authorization or approval as may be required by section 48-612 et seq.
- 588 (d) Stormwater pollution prevention plan. The permittee must develop prior to the land
- disturbing activity, implement, and keep at the site for inspection a stormwater pollution
- prevention plan that meets the requirements set forth in section 35-95 and a pollution prevention
- plan that meets the requirements set forth in section 35-96.
- 592 (e) Bonds, maintenance agreement, and fees. No stormwater management permit shall be issued
- by the director until the bond and maintenance agreement requirements pursuant to section 35-
- 594 105 have been met and the fees required to be paid pursuant to section 35-110 are received.
- (f) Exemptions for land disturbance of less than 2,500 square feet. A land disturbing activity that results in a land disturbance of less than 2,500 square feet shall be exempt from this article except that the following shall apply:
- 598 (1) A land disturbing activity located within a resource protection area shall comply with the provisions of section 35-97.
  - (2) A land disturbing activity involving a direct connection to the city's stormwater conveyance system or the installation of a potable water or geothermal well shall obtain a stormwater management permit and may be subject to, at the discretion of the director, the provisions of section 35-92 (stormwater management plan) and section 35-101 (erosion and sediment control plan) or elements thereof.
- 605 (g) Exemptions for land disturbance of less than one acre but 2,500 square feet or greater within

- the resource management area. A land disturbing activity that results in a land disturbance of less than one acre but greater 2,500 square feet or greater within the resource management area shall be exempt from section 35-95 (stormwater pollution prevention plan), section 35-96 (pollution prevention plan), and the requirement to obtain a general permit in accordance with section 35-91(b)(2) unless otherwise required by the City Code or state or federal law.
- 611 (h) *Additional exemptions*. The following shall be exempt from the requirements of this article unless otherwise required by the Falls Church Code or state or federal law:
  - (1) Discharges to a sanitary sewer.

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- (2) Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original construction of a project. The paving of existing road with a compacted or impervious surface and re-establishment of existing ditches and shoulders is deemed routine maintenance if performed in accordance with this subsection.
- (3) Conducting land disturbing activities in response to a public emergency where the related work requires immediate authorization to avoid imminent endangerment to human health or the environment. In such situations, the director shall be advised of the disturbance within seven days of commencing the land disturbing activity and compliance with this article shall be required within 30 days of commencing the land disturbing activity.
- (4) Land disturbances associated with permitted or deep mining operations and projects, or oil and gas operations and projects conducted under the provisions of Title 45.1 of the Code of Virginia.
- (5) Land clearing for agricultural or silvicultural purposes, and related activities, in accordance with section 10.1-603.8.C.2 of the Code of Virginia.
- (6) Activities under a state or federal reclamation program to return an abandoned property to an agricultural or open land use.

#### Sec. 35-92. Stormwater management plan.

- (a) *Plan contents*. The stormwater management plan must apply the stormwater management technical standards set forth in section 35-93 to the entire land disturbing activity, consider all sources of surface runoff and all sources of subsurface and groundwater flows converted to subsurface runoff, and include the following information:
  - (1) Information on the type and location of stormwater discharges; information on the features to which stormwater is being discharged including surface waters, and the predevelopment and post-development drainage areas;
- 639 (2) Contact information including the name, address, and telephone number of the owner and the tax reference number and parcel number of the property or properties affected;
  - (3) A narrative that includes a description of current site conditions and final site conditions;
- 642 (4) A general description of the proposed stormwater management facilities and the 643 mechanism through which the facilities will be operated and maintained after construction is 644 complete;
  - (5) Information on the proposed stormwater management facilities including:
    - a. The type of facilities;
  - b. Location, including geographic coordinates;

648 c. Acres treated; and,

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- 649 d. The surface waters into which the facility will discharge.
- 650 (6) Hydrologic and hydraulic computations, including runoff characteristics;
- 651 (7) Documentation and calculations verifying compliance with the water quality and quantity 652 requirements of section 35-93;
  - (8) A map or maps of the site that depicts the topography of the site and includes:
    - a. All contributing drainage areas;
- 655 b. Existing streams, ponds, culverts, ditches, wetlands, other water bodies, and 656 floodplains;
  - c. Soil types, forest cover, and other vegetative areas;
- 658 d. Current land use including existing structures, roads, and locations of known utilities 659 and easements;
- 660 e. Sufficient information on adjoining parcels to assess the impacts of stormwater from 661 the site on these parcels;
  - f. The limits of clearing and grading, and the proposed drainage patterns on the site;
  - g. Proposed buildings, roads, parking areas, utilities, and stormwater management facilities; and,
    - h. Proposed land use with tabulation of the percentage of surface area to be adapted to various uses, including but not limited to planned locations of utilities, roads, and easements.
  - (b) Off-site compliance options. If an operator intends to meet the water quality requirements set forth in section 35-93(b) through the use of off-site compliance options in accordance with section 35-93(c), then a letter of availability from the off-site provider must be included. Approved off-site options must achieve the necessary nutrient reductions prior to the commencement of the land disturbing activity except as otherwise allowed by §10.1-603.8:1 of the Code of Virginia.
- (c) Requirements for those preparing plans. Elements of the stormwater management plans that 674 675 include activities regulated under Chapter 4 (§54.1-400 et seq.) of Title 54.1 of the Code of
- 676 Virginia shall be appropriately sealed and signed by a professional registered in the 677 Commonwealth of Virginia pursuant to Article 1 (§54.1-400 et seq.) of Chapter 4 of Title 54.1 of
- 678 the Code of Virginia.
- 679 (d) Construction record drawing. A construction record drawing for permanent stormwater
- management facilities shall be submitted to the director. The construction record drawing shall 680
- 681 be appropriately sealed and signed by a professional registered in the Commonwealth of
- 682 Virginia, certifying that the stormwater management facilities have been constructed in
- 683 accordance with the approved plan.

# Sec. 35-93. Stormwater management technical standards.

- 686 (a) General stormwater management technical standards. All land disturbing activities
- regulated pursuant to this article within the city shall comply with the following general technical 687 standards.
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(1) Land disturbance shall be limited to the area necessary to provide for the proposed use or development. In accordance with an approved grading plan, the limits of land disturbance, including clearing or grading, shall be strictly defined. These limits shall be clearly shown on submitted plans and physically marked on the development site.

- (2) Existing indigenous vegetation and trees shall be preserved to the maximum extent practicable, consistent with the proposed use or development, in accordance with chapters 14 and 44, pertaining respectively to environment and vegetation, and as follows.
  - a. Existing trees over two inches in DBH and shrubs greater than five feet in height shall be preserved outside the approved construction footprint consistent with subsection (a)(1) of this section. Diseased or weakened trees, by age, storm, fire or other injury, may be required to be removed, by the director.
  - b. The regulation of any historic, specimen, street, park, memorial and other public trees shall be regulated in accordance with chapter 44, pertaining to vegetation. This may include the bonding of these types of trees in situations where the critical root zone (CRZ) or canopies extend onto the site.
  - c. Clearing shall be allowed only to provide necessary access, positive site drainage, water quality BMPs and the installation of utilities.
  - d. Tree preservation shall be in accordance with the City of Falls Church Tree Preservation Standards and Specifications. A copy of the approved plan and the specifications shall be kept on site at all times.
  - e. Prior to clearing and grading, tree preservation fencing, consistent with the City of Falls Church Tree Preservation Standards and Specifications, signs, or other such material may be required by the director. These preservation measures shall be installed to protect the CRZ of any woody vegetation to be preserved on the site, as well as to protect the CRZ of any woody vegetation trees on adjacent properties including rights-of-way that extend onto the site.
  - f. Tree preservation fencing shall remain in place throughout all phases of construction. Fencing shall not be removed until all construction equipment has left the site and written approval is granted by the director.
  - g. Exceptions may be granted to allow access to the site and work area, with specific conditions established by the director.
  - h. The storage of equipment, materials, debris, or fill shall not be allowed within the enclosure of the tree preservation fencing.
  - i. The applicant shall submit, in writing to the director, a verification that all required tree preservation fencing and required preservation measures have been completed. The director shall inspect and approve this verification, within three business days, prior to the issuance of any permits.
- (3) Natural ground cover, especially woody vegetation, shall be used to the extent that is practicable, as it is most effective in holding soil in place and preventing site erosion. Adaptability to local conditions without the use of harmful fertilizers or pesticides, and the ability to filter runoff, make the use of indigenous vegetation preferable to non-indigenous plantings.

- 731 (4) Land development shall minimize impervious cover associated with the proposed use or development. Keeping impervious cover to a minimum enhances rainwater infiltration and effectively reduces stormwater runoff potential.
- 734 (b) *Water quality technical standards*. All land disturbing activities regulated pursuant to this article within the city shall comply with the following technical standards for water quality.
  - (1) New development. The total phosphorus load of a new development project shall not exceed 0.41 pounds per acre per year as calculated in accordance with this section.
  - (2) Development on prior developed lands.

- a. Notwithstanding subsections b through f below, a regulated land disturbing activity involving a single family detached residential dwelling shall meet the applicable standard for new development.
- b. For regulated land disturbing activities disturbing greater than or equal to one acre that result in no net increase in impervious cover from the pre-development condition, the total phosphorus load shall be reduced at least 20% below the pre-development total phosphorus load.
- c. For regulated land disturbing activities disturbing less than one acre that result in no net increase in impervious cover from the pre-development condition, the total phosphorus load shall be reduced at least 10% below the pre-development total phosphorus load.
- d. For land-disturbing activities that result in a net increase in impervious cover over the pre-development condition, the design criteria for new development shall be applied to the increased impervious area. Depending on the area of disturbance, the criteria of subdivisions b or c above shall be applied to the remainder of the site.
- e. In lieu of subdivision d, the total phosphorus load of a linear development project occurring on prior developed lands shall be reduced 20% below the pre-development total phosphorus load.
- f. The total phosphorus load shall not be required to be reduced below the applicable standard for new development.
- (3) Compliance with subsections (1) and (2) above shall be determined using the Virginia Runoff Reduction Method and through the use of stormwater BMPs established in 4VAC50-60-65 or found at the Virginia BMP Clearinghouse website, except as may be limited by the director in accordance the provisions of 4VAC50-60-65.D.
- 763 (c) Off-site water quality compliance options.
  - (1) The director shall allow operators to utilize off-site compliance options to meet the requirements of subsection (b) above in accordance with 4VAC50-60-69 under the following conditions:
    - a. Less than five acres of land will be disturbed;
    - b. The post-construction phosphorus control requirement is less than 10 pounds per year; or,
    - c. At least 75% of the required phosphorus nutrient reductions are achieved on-site. If at least 75% of the required phosphorus nutrient reductions cannot be met on-site, and the operator can demonstrate to the satisfaction of the director that (i) alternative site designs

have been considered that may accommodate on-site best management practices, (ii) on-site best management practices have been considered in alternative site designs to the maximum extent practicable, (iii) appropriate on-site best management practices will be implemented, and, (iv) full compliance with post-development nonpoint nutrient runoff compliance requirements cannot practicably be met on-site, then the required phosphorus nutrient reductions may be achieved, in whole or in part, through the use of off-site compliance options.

- (2) The director may establish criteria in addition to those established in subsection (c)(1) of this section to allow an operator to use nutrient credits in accordance with §10.1-603.8:1 of the Code of Virginia to meet required phosphorus reductions.
- (3) Notwithstanding subsections (c)(1) and (c)(2) this subsection, offsite options shall not be allowed:
  - a. Unless the selected offsite option achieves the necessary nutrient reductions prior to the commencement of the land disturbing activity. In the case of a phased project, the operator may acquire or achieve offsite nutrient reductions prior to the commencement of each phase of land disturbing activity in an amount sufficient for each phase.
  - b. In contravention of local water quality-based limitations at the point of discharge that are consistent with the determinations made pursuant to subsection B of §62.1-44.19:7 of the Code of Virginia, contained in the city's MS4 program plan accepted by the Virginia Department of Environmental Quality, or as otherwise may be established or approved by the VSWCB.
- (d) Water quantity technical standards. All land disturbing activities regulated pursuant to this article within the city shall comply with the following technical standards for water quantity.
  - (1) Channel protection. Concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet the criteria in this section, where applicable, from the point of discharge to a point to the limits of analysis in subdivision d of this subsection.
    - a. Manmade stormwater conveyance systems. When stormwater from a development is discharged to a manmade stormwater conveyance system, following the land disturbing activity, either:
      - 1. The manmade stormwater conveyance system shall convey the post-development peak flow rate from the two-year 24-hour storm event without causing erosion of the system. Detention of stormwater or downstream improvements may be incorporated into the approved land disturbing activity to meet these criteria, at the discretion of the director.
      - 2. The peak discharge requirements for concentrated stormwater flow to natural stormwater conveyance systems in subdivision c shall be met.
    - b. Restored stormwater conveyance systems. When stormwater from a development is discharged to a restored stormwater conveyance system that has been restored using natural design concepts, following the land disturbing activity, either:
      - 1. The development shall be consistent, in combination with other stormwater runoff, with the design parameters of the restored stormwater conveyance system that is functioning in accordance with the design objectives; or,

- 2. The peak discharge requirements for concentrated stormwater flow to natural stormwater conveyance systems in subdivision c shall be met.

  C. Natural stormwater conveyance systems. When stormwater from a development is
  - c. Natural stormwater conveyance systems. When stormwater from a development is discharged to a natural stormwater conveyance system, the maximum peak flow rate from the one-year 24-hour storm following the land disturbing activity shall be calculated as follows:

 $Q_{Developed} \le I.F*(Q_{Pre-developed}*RV_{Pre-developed})/RV_{Developed}$ 

Under no condition shall  $Q_{Developed}$  be greater than  $Q_{Pre-developed}$  nor shall  $Q_{Developed}$  be required to be less than that calculated in the equation  $(Q_{Forest}*RV_{Forest})/RV_{Developed}$ ; where:

- I.F. (Improvement Factor) equals 0.8 for sites > 1 acre or 0.9 for sites  $\le 1$  acre.
- $Q_{Developed}$  = The allowable peak flow rate of runoff from the developed site.
- $RV_{Developed}$  = The volume of runoff from the site in the developed condition.
- $Q_{\text{Pre-developed}}$  = The peak flow rate of runoff from the site in the pre-developed condition.
- $Q_{Forest}$  = The peak flow rate of runoff from the site in a forested condition.
- $RV_{Forest}$  = The volume of runoff from the site in a forested condition.
- d. Limits of analysis. Unless subdivision c of this subsection is utilized to show compliance with the channel protection criteria, stormwater conveyance systems shall be analyzed for compliance with channel protection criteria to a point where either:
  - 1. Based on land area, the site's contributing drainage area is less than or equal to 1.0% of the total watershed area; or,
  - 2. Based on peak flow rate, the site's peak flow rate from the one-year 24-hour storm is less than or equal to 1.0% of the existing peak flow rate from the one-year 24-hour storm prior to the implementation of any stormwater quantity control measures.
- (2) Flood protection. Concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet one of the following criteria as demonstrated by use of acceptable hydrologic and hydraulic methodologies:
  - a. Concentrated stormwater flow to stormwater conveyance systems that currently do not experience localized flooding during the 10-year 24-hour storm event: The point of discharge releases stormwater into a stormwater conveyance system that, following the land disturbing activity, confines the post-development peak flow rate from the 10-year 24-hour storm event within the stormwater conveyance system. Detention of stormwater or downstream improvements may be incorporated into the approved land disturbing activity to meet this criterion at the discretion of the director.
  - b. Concentrated stormwater flow to stormwater conveyance systems that currently experience localized flooding during the 10-year 24-hour storm event: The point of discharge either:
    - 1. Confines the post-development peak flow rate from the 10-year 24-hour storm event within the stormwater conveyance system to avoid the localized flooding. Detention of stormwater or downstream improvements may be incorporated into the

- approved land disturbing activity to meet this criterion at the discretion of the director.
  - 2. Releases a post-development peak flow rate for the 10-year 24-hour storm event that is less than the pre-development peak flow rate from the 10-year 24-hour storm event. Downstream stormwater conveyance systems do not require any additional analysis to show compliance with flood protection criteria if this option is utilized.
  - c. Limits of analysis. Unless subsection b of this subsection is used to comply with the flood protection criteria, stormwater conveyance systems shall be analyzed for compliance with flood protection criteria to a point where:
    - 1. The site's contributing drainage area is less than or equal to 1.0% of the total watershed area draining to a point of analysis in the downstream stormwater conveyance system;
    - 2. Based on peak flow rate, the site's peak flow rate from the 10-year 24-hour storm event is less than or equal to 1.0% of the existing peak flow rate from the 10-year 24-hour storm event prior to the implementation of any stormwater quantity control measures; or,
    - 3. The stormwater conveyance system enters a mapped floodplain or other flood-prone area, adopted in accordance with section 48-612 et seq.
  - (3) Increased volumes of sheet flow resulting from pervious or disconnected impervious areas, or from physical spreading of concentrated flow through level spreaders, must be identified and evaluated for potential impacts on down-gradient properties or resources. Increased volumes of sheet flow that will cause or contribute to erosion, sedimentation, or flooding of down gradient properties or resources shall be diverted to a stormwater management facility or a stormwater conveyance system that conveys the runoff without causing down gradient erosion, sedimentation, or flooding. If all runoff from the site is sheet flow and the conditions of this subsection are met, no further water quantity controls are required.
  - (4) For the purposes of computing pre-development runoff, all pervious lands on the site shall be assumed to be in good hydrologic condition in accordance with the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) standards, regardless of conditions existing at the time of computation. Pre-development runoff calculations utilizing other hydrologic conditions may be utilized provided that it is demonstrated to and approved by the director that actual site conditions warrant such considerations.
  - (5) Pre-development and post-development runoff characteristics and site hydrology shall be verified by site inspections, topographic surveys, available soil mapping or studies, and calculations consistent with good engineering practices. Guidance provided in the Virginia Stormwater Management Handbook and by the Virginia Stormwater BMP Clearinghouse shall be considered appropriate practices.
- 894 (e) Additional water quantity technical standards in the Four Mile Run watershed.
  895 Notwithstanding the requirements of subsection (d), within the Four Mile Run watershed postdevelopment peak runoff during a 100-year frequency storm shall not increase the peak runoff of
  897 the Four Mile Run Flood Control Channel as required by the city's contract with the United
  898 States Army Corps of Engineers.
- 899 (f) Design storms and hydrologic methods.

- 900 (1) The prescribed design storms are the one-year, two-year, and 10-year 24-hour storms using the site-specific rainfall precipitation frequency data recommended by the U.S.
- National Oceanic and Atmospheric Administration (NOAA) Atlas 14. Partial duration time series shall be used for the precipitation data.
- 904 (2) All hydrologic analysis shall be based on the existing watershed characteristics and how the ultimate development condition of the subject project will be addressed.
  - (3) The NRCS synthetic 24-hour rain distribution and models, including, but not limited to TR-55 and TR-20; hydrologic and hydraulic methods developed by the U.S. Army Corps of Engineers; or, other standard hydrologic and hydraulic methods, shall be used to conduct the analysis described in this section.
  - (4) For drainage areas of 200 acres or less, the Rational Method may be used for evaluating peak discharges. For drainage areas of 200 acres or less, the Modified Rational Method may be used for evaluating peak discharges.
- 913 (g) *Impounding structures*. Stormwater management wet ponds and extended detention dry ponds that are not covered by the Virginia Impounding Structure Regulations (4VAC50-20 et seq.) shall, at a minimum, be engineered for structural integrity for the 10-year storm event.
- 916 (h) *Grandfathering*. The grandfathering provisions established in 4VAC50-60-48 shall apply to subsections (b) through (d) above as applicable.
- 918 (i) *Exceptions*. The director may grant exceptions to the technical requirements of this section 919 provided that the exception is the minimum necessary to afford relief, reasonable and appropriate 920 conditions are imposed so that the intent of this article are preserved, granting the exception will 921 not confer any special privileges that are denied in other similar circumstances, and exception 922 requests are not based upon conditions or circumstances that are self-imposed or self-created. 923 Economic hardship alone is not sufficient reason to grant an exception from the requirements of 924 this article.
  - (1) Exceptions to the requirement that the land disturbing activity obtain required general permit shall not be given by the director, nor shall the director approve the use of a BMP not found on the Virginia Stormwater BMP Clearinghouse website, or any other control measure duly approved by the director of the Virginia Department of Environmental Quality.
  - (2) Exceptions to requirements for phosphorus reductions shall not be allowed unless offsite options otherwise permitted pursuant to subsection (c) and 4VAC50-60-69 have been considered and found not available.

#### Sec. 35-94. Stormwater management plan review.

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- (a) *Plan review*. The director shall review stormwater management plans and shall approve or disapprove a stormwater management plan according to the following:
  - (1) The director shall determine the completeness of a plan in accordance with section 26-326 and shall notify the applicant, in writing, of such determination, within 15 calendar days of receipt. If the plan is deemed to be incomplete, the above written notification shall contain the reasons the plan is deemed incomplete.
- (2) The director shall have an additional 60 calendar days from the date of the communication of completeness to review the plan, except that if a determination of completeness is not made within the time prescribed in subdivision (1), then plan shall be

- deemed complete and the director shall have 60 calendar days from the date of submission to review the plan.
- 945 (3) The director shall review any plan that has been previously disapproved, within 45 calendar days of the date of resubmission.
  - (4) During the review period, the plan shall be approved or disapproved and the decision communicated in writing to the person responsible for the land-disturbing activity or his designated agent. If the plan is not approved, the reasons for not approving the plan shall be provided in writing. Approval or denial shall be based on the plan's compliance with the requirements of this article.
  - (5) If a plan meeting all requirements of this article is submitted and no action is taken within the time provided above in subdivision (2) for review, the plan shall be deemed approved.
  - (b) *Plan modifications*. Approved stormwater plans may be modified as follows:
    - (1) Modifications to an approved stormwater management plan shall be allowed only after review and written approval by the director. The director shall have 60 calendar days to respond in writing either approving or disapproving such request.
    - (2) The director may require that an approved stormwater management plan be amended, within a time prescribed by the director, to address any deficiencies noted during inspection.

# Sec. 35-95. Stormwater pollution prevention plan.

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- 962 (a) *Plan contents*. The SWPPP shall include the content specified by 4VAC50-60-54 and must also comply with the requirements and general information set forth in 4VAC50-60-1170, Section II of the general permit.
- 965 (b) *Plan amendments*. The SWPPP shall be amended by the operator whenever there is a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants to state waters which is not addressed by the existing SWPPP.
- 968 (c) *Location and availability of plan for review*. The SWPPP must be maintained by the operator at a central location onsite. If an onsite location is unavailable, notice of the SWPPP's location must be posted near the main entrance at the construction site. Operators shall make the SWPPP available for public review in accordance with Section II of the general permit, either electronically or in hard copy.

# Sec. 35-96. Pollution prevention plan.

- (a) *Plan contents, implementation, and amendments*. The pollution prevention plan shall include the content specified by 4VAC50-60-56, shall be developed, implemented, and updated as necessary, and must detail the design, installation, implementation, and maintenance of effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented, and maintained to:
- (1) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;

- 983 (2) Minimize the exposure of building materials, building products, construction wastes, 984 trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and to stormwater; and,
- 986 (3) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.
- 988 (b) *Prohibited discharges*. The pollution prevention plan shall include effective best management practices to prohibit the following discharges:
  - (1) Wastewater from washout of concrete, unless managed by an appropriate control;
- 991 (2) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials;
- 993 (3) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and.
  - (4) Soaps or solvents used in vehicle and equipment washing.

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996 (c) *Prohibitions on dewatering activities*. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls.

# Sec. 35-97. Chesapeake Bay preservation areas established.

- 1001 (a) *Chesapeake Bay preservation areas*. All land within the city is designated as a Chesapeake 1002 Bay preservation area, which is divided into resource protection areas and resource management areas.
- 1004 (b) *Resource protection areas*. Resource protection areas shall consist of the following lands described herein that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may cause significant degradation to the quality of state waters:
  - (1) Nontidal wetlands connected by surface flow and contiguous to water bodies with perennial flow;
  - (2) Such other lands considered by the city to meet some or all of the criteria described in subsection (b) of this section, and considered to be necessary to protect the quality of state waters. Other lands to be included within the RPA are water bodies with perennial flow, all natural stream channels, and manmade open stream channels, as generally identified on the city's Chesapeake Bay preservation area (CBPA) map; and,
- (3) A vegetated buffer area not less than 100 feet in width located adjacent to and landward of the components listed in subsections (b)(1) and (2) of this section, and along both sides of any water body with perennial flow. This distance shall be measured from the top of the stream bank or the edge of stream or wetland if there is no bank. Notwithstanding permitted uses, encroachments, vegetation clearing, waivers, nonconformities, exemptions, and exceptions as set forth in this section and section 35-98, the 100-foot-wide buffer area is never reduced in width.
- The 100-foot buffer area shall be deemed to achieve a 75 percent reduction of sediments and a 40 percent reduction of nutrients.

- 1024 (c) *Resource management areas*. Resource management areas shall consist of all land within the city corporate boundary that is not designated as resource protection areas.
- 1026 (d) Interpretation of resource protection area boundaries and delineation by the applicant. The
- 1027 city's adopted CBPA map shows only the general location of the RPA and should be consulted
- by persons contemplating activities, modifications, or encroachments in the RPA. The specific
- boundaries of the RPA for each site or parcel shall be determined by the applicant as part of a
- stormwater management permit, water quality impact assessment, grading plan, demolition
- permit, building permit, site plan, subdivision plat, or any other application for land disturbance,
- and delineated on all submitted plans, subject to approval of the director and in accordance with
- this article. The identification of resource protection area boundaries shall be established by a
- land surveyor authorized to practice in the commonwealth, and be based on reliable,
- scientifically valid, and specific information, as approved by the director, from actual field
- evaluations of the site. The city CBPA map shall be used only as a guide to the general location
- of resource protection areas. The accuracy of the RPA boundary delineation submitted by the
- applicant, when in question, shall be verified by the director.

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- 1039 (e) Permitted land disturbing activities within RPAs. A land disturbing activity may be allowed
- in the resource protection area, subject to completion of a water quality impact assessment as
- required in section 35-99 and the approval of the director, only if it falls into one of the following
- use categories and meets all criteria and requirements of this article and those of the underlying
- zoning district and all other applicable city, state, and federal regulations:
  - (1) A new or expanded water-dependent facility may be allowed within a resource protection area provided that:
    - a. It does not conflict with the comprehensive plan;
    - b. Any nonwater-dependent component is located outside of resource protection areas; and,
    - c. Access will be provided with the minimum disturbance necessary, and where possible, a single point of access will be provided.
    - (2) Redevelopment shall be permitted in the resource protection area only if there is no increase in the amount of impervious cover and no further encroachment within the resource protection area.
    - (3) Roads and driveways not exempt in section 35-98 are not permitted unless each of the following conditions is met:
      - a. The director makes a finding that there are no reasonable alternatives to aligning the road or driveway in or across the resource protection area; and,
      - b. The alignment and design of the road or driveway are optimized, consistent with other applicable requirements, to minimize encroachment in the resource protection area and adverse effects on water quality.
    - (4) Flood control and stormwater management facilities that drain or treat water from multiple development projects or from a significant portion of a watershed may be allowed in resource protection areas, provided that:
      - a. The director has conclusively established that the location of the facility within the resource protection area is the optimum location;

b. The size of the facility is the minimum necessary to provide necessary flood control or stormwater treatment, or both;

- c. The facility must be consistent with a stormwater management program that has been approved in accordance with 4VAC50-60-92 of the Virginia Stormwater Management Program permit regulations;
- d. All applicable permits for construction in state or federal waters must be obtained from the appropriate state and federal agencies;
- e. Routine maintenance is allowed to be performed on such facilities to assure that they continue to function as designed; and,
- f. It is not the intent of this division to allow a best management practice that collects and treats runoff from only an individual lot or some portion of the lot to be located within a resource protection area.
- (f) Removal of vegetation in the resource protection area buffer area. Indigenous vegetation may be removed from the RPA buffer area only as permitted by the director to provide for reasonable sight lines, access paths, general woodlot management, and best management practices, including those that prevent upland erosion and concentrated flows of stormwater, as follows. All requests for vegetation removal shall be submitted in writing to the director for evaluation.
  - (1) Trees may be pruned or removed as necessary subject to the written approval of the director to provide for sight lines and vistas, provided that, where removed, they shall be replaced with other vegetation that is equally effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff.
  - (2) Any path shall be constructed and surfaced so as to effectively control erosion.
  - (3) Dead, diseased, or dying trees or shrubbery and noxious weeds (such as Johnson grass, kudzu, and multiflora rose) may be removed and thinning of trees may be allowed subject to the written approval of the director, pursuant to sound horticultural practice incorporated into locally adopted standards.
- (4) For shoreline erosion control projects, trees and woody vegetation may be removed, necessary control techniques employed, and appropriate vegetation established to protect or stabilize the shoreline in accordance with the best available technical advice and applicable permit conditions or requirements.
- (g) *Permitted encroachments into the buffer area*. Encroachments into the buffer area may be allowed only in accordance with this section.
  - (1) When the application of the buffer area would result in the loss of a buildable area or a lot or parcel recorded prior to October 1, 1989, encroachments into the buffer area may be allowed by the director, through an administrative process, and in accordance with the following criteria:
    - a. Encroachments into the buffer area shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities;
    - b. Where practicable, a vegetated area that will maximize water quality protection, mitigate the effects of buffer encroachment, and is equal to the area of encroachment into the buffer area shall be established elsewhere on the lot or parcel; and,
    - c. The encroachment shall not extend into the seaward 50 feet of the buffer area.

- 1108 (2) When the application of the buffer area would result in the loss of a buildable area on a lot or parcel recorded between October 1, 1989, and March 1, 2002, encroachments into the 1109 buffer area may be allowed by the director in accordance with the following criteria: 1110
  - a. The lot or parcel was created as a result of a legal process conducted in conformity with the city's subdivision regulations;
  - b. Conditions or mitigation measures imposed through a previously approved exception shall be met;
  - c. If the use of a best management practice was previously required, the best management practice shall be evaluated to determine if it continues to function effectively, and if necessary, the best management practice shall be reestablished or repaired and maintained as required; and,
  - d. The criteria in subsection (g)(1) of this section shall be met.
- 1120 (h) Re-establishment of buffer areas. The buffer area required in subsection (b)(2) of this section 1121 shall consist of vegetation that is effective in retarding runoff, preventing erosion, and filtering
- 1122 nonpoint source pollution from runoff. Where such vegetation is not sufficient to meet this
- 1123 purpose, it shall be established in accordance with this section.
- 1124 (1) Where buffer areas are to be established, they shall consist of a mixture of shade trees,
- 1125 understory trees, shrubs and groundcovers. Density of the buffer shall be as described in the
- 1126 Riparian Buffers Modification and Mitigation Guidance Manual restoration and/or establishment
- 1127 tables.

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- 1128 (2) Vegetation shall be chosen from the city recommended lists of trees and/or native floodplain
- species. Wetland plantings, including herbaceous plantings, and/or wetland seed mix shall be 1129
- 1130 used where site conditions warrant. Plant materials and planting techniques shall be in
- 1131 accordance with The City of Falls Church Specifications for Planting.
- 1132 (3) Where invasive plant species are present, the director may require their removal as part of the re-establishment of the buffer area. 1133

#### 1135 Sec. 35-98. Chesapeake Bay preservation areas; administrative waivers, nonconformities, 1136 exemptions, and exceptions.

- 1137 (a) Limitations of this section. The administrative waivers, nonconformities, exemptions, and
- 1138 exceptions in this section shall only apply to the requirements of section 35-97. All other
- 1139 requirements of this article shall apply unless otherwise exempted or granted an exception by the
- 1140 director.
- 1141 (b) Nonconforming structures. Any structure or nonagricultural use that was legally established
- 1142 in accordance with the provisions of this Code and was in existence on the date of the adoption
- 1143 of the ordinance from which this article is derived, and made nonconforming by operation of this
- 1144 article, may continue and be maintained, but shall not be enlarged or expanded, with the
- 1145 exception that the director may grant a waiver for structures on legal nonconforming lots or
- 1146 parcels to provide for remodeling and alterations to such nonconforming structures. A
- nonconforming use development waiver shall become null and void if substantial work on the 1147
- 1148 project has not commenced within 12 months of the date of permit issuance.
- (c) Reconstruction of preexisting structures. It is not the intent of this division to prevent the 1149
- 1150 reconstruction of preexisting structures within Chesapeake Bay preservation areas from

- occurring as a result of casualty loss, unless otherwise restricted by city ordinance. Such
- reconstruction shall occur within two years after the destruction or damage and there shall be no
- increase in the amount of impervious area and no further encroachment into the RPA, to the
- extent possible by sound engineering practices.
- (d) Administrative waivers for the expansion of preexisting structures. An application for the
- expansion or modification of an existing legal principle structure on legal nonconforming lots or
- parcels may be approved by the director through an administrative process for additions to the
- existing legal principal structures, and additions of attached decks, garages, and other customary
- and incidental structures attached to the principal structure; provided the following findings are
- 1160 made:

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- (1) The request for the waiver is the minimum necessary to afford relief;
- (2) Granting the waiver will not confer upon the applicant any specific privileges that are denied by this article to other property owners in similar situations;
- (3) The waiver is in harmony with the purpose and intent of this article and does not result in a net increase in nonpoint source pollution load;
- (4) The waiver is not based on conditions or circumstances that are self-created or self-imposed;
- 1168 (5) Reasonable and appropriate conditions are imposed, as warranted, that will prevent the waiver from causing a degradation of water quality;
- (6) Other findings, as appropriate and required by the city are met; and
- 1171 (7) In no case shall this provision apply to accessory structures. Such requests shall be heard 1172 by the planning commission through the exceptions process described in subsection (g) of 1173 this section
- (e) *Exemptions for public utilities, railroads, public roads, and facilities.* The following shall be exempt provided that all state and federal requirements have been met.
  - (1) Construction, installation, operation, and maintenance of electric, natural gas, fiber-optic, and telephone transmission lines, railroads, and public roads and their appurtenant structures.
  - (2) The exemption of public roads and drives is further conditioned on the optimization of the road alignment and design, consistent with other applicable requirements, to prevent or otherwise minimize:
    - a. Encroachment in the resource protection area; and
    - b. Adverse effects on water quality.
  - (3) Construction, installation and maintenance of water, sewer, natural gas, and underground fiber-optic telecommunications and cable television lines owned, permitted, or both, by the city or regional service authority shall be exempt; provided that:
    - a. To the degree possible, the location of such utilities and facilities should be outside resource protection areas;
    - b. No more land shall be disturbed than is necessary to provide for the proposed utility installation; and,
- 1190 c. All such construction, installation and maintenance of such utilities and facilities shall 1191 be in compliance with all applicable state and federal permits and designed and 1192 conducted in a manner that protects water quality.

- (4) Passive recreation facilities such as boardwalks, trails and pathways; and historic preservation and archaeological activities may be exempt, as determined by the director, provided that any land disturbing activity exceeding an area of 2,500 square feet shall comply with the requirements of section 35-101.
  - (f) Exceptions in Chesapeake Bay preservation areas.

- (1) Requests for planning commission review. Requests for exceptions to the requirements of section 35-97, permitted development or uses, modifications, and encroachments within resource protection areas, and requests for exceptions to modify nonconforming, or construct new, nonattached accessory structures and uses in the RPA buffer, as noted in subsection (d) of this section, shall be made, in writing, to the director within 30 calendar days of the director's official decision. This request shall identify the impacts of the proposed exception on water quality and on lands within the resource protection area through the performance of a water quality impact assessment, which complies with the provisions of section 35-99. The director will forward the request and the water quality impact assessment to the planning commission for its consideration. The city shall notify the affected public of any such exception requests and the planning commission shall consider these requests in a public hearing in accordance with Code of Virginia, §15.2-2204, except only one hearing shall be required.
- (2) Request for administrative review. Requests for exceptions to provisions other than section 35-97, permitted development or uses, modifications, and encroachments within resource protection areas, and subsection (d) of this section. Exceptions to modify nonconforming, or construct new nonattached accessory structures and uses in the RPA buffer, may be made in writing to the director for administrative review.
  - (3) Evaluation criteria for administrative or planning commission review of exceptions as applied to subsections (f)(1) and (2) of this section. The director or the planning commission shall review the request for an exception and the water quality impact assessment and may grant the exception with such conditions and safeguards as deemed necessary to further the purpose and intent of this division, and if the director or the planning commission finds that:
    - a. Granting the exception will not confer upon the applicant any special privileges denied by this article to other property owners in the overlay district;
    - b. The exception request is not based on conditions or circumstances that are self-created or self-imposed, nor does the request arise from conditions or circumstances either permitted or nonconforming that are related to adjacent parcels;
    - c. The exception request is the minimum necessary to afford relief;
    - d. The exception request will be in harmony with the purpose and intent of this article, not injurious to the neighborhood or otherwise detrimental to the public welfare, and is not of substantial detriment to water quality; and,
    - e. Reasonable and appropriate conditions are imposed which will prevent the exception request from causing a degradation of water quality.

If the director or the planning commission cannot make the required findings or refuses to grant the exception, the request for an exception together with the water quality impact assessment and the written findings and rationale for the decision shall be returned to the applicant.

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# Sec. 35-99. Water quality impact assessment.

- 1238 (a) When required. A water quality impact assessment shall be required for any:
- 1239 (1) Proposed land disturbance, development or redevelopment activity within the resource protection area;
- 1241 (2) Buffer encroachment, as provided for in section 35-97; and,
- 1242 (3) Other development in resource management areas if regarded as appropriate by the 1243 director due to unique site characteristics or the intensity of the proposed use or development 1244 and its potential impact on water quality.
- 1245 (b) *Agreement in lieu of an assessment.* Where a land disturbing activity subject to this section results in less than 2,500 square feet of disturbance, an agreement in lieu of an assessment may be substituted for a water quality impact assessment if executed by the director.
- 1248 (c) *Contents*. The requirements for the water quality impact assessment will vary depending on the magnitude of the proposed development project.
  - (1) The purpose of the water quality impact assessment is to identify the impacts of proposed development, redevelopment, or land disturbance on water quality, lands within the resource protection area, and other environmentally sensitive lands, and to determine specific measures for mitigation of these impacts. The water quality impact assessment must be of sufficient specificity to demonstrate compliance with the criteria of this article.
    - (2) A water quality assessment shall include a site drawing to scale which shows the following:
      - a. Location of the components of the RPA and the 100-foot buffer area measured from the top of the stream bank or edge of stream when there is no bank. The location of the RPA line shall be prepared and certified by a land surveyor authorized to practice in the commonwealth;
      - b. Location and nature of the proposed encroachment into the RPA buffer area, including:
        - 1. Type of paving material;
        - 2. Areas of clearing or grading;
        - 3. Location of any structures, drives, or other impervious cover; and
        - 4. Sewage disposal systems or other utilities;
      - c. Estimation of pre-development and post-development impervious surfaces on the site and stormwater calculations;
      - d. Type and location of proposed best management practices to mitigate the proposed encroachment and the location of existing and proposed runoff outfalls or drainage pathways from the property, including the location of erosion and sediment control devices such as silt fencing, stormwater inlet protection, and temporary soil storage; and
      - e. Pollutant load calculations to display that the vegetative buffer and/or best management practice will reduce the sediment load by 75 percent and nutrient load by 40 percent.
    - (3) Certain water quality impact requirements modifications are as follows:

- a. Additional hydrogeological and other information may be required by the director if the size and scope of the proposed project is large enough to require additional analysis to ensure the protection of the CBPA.
  - b. Applicants for development and redevelopment of land or land disturbance within the RPA may apply, in writing, to the city engineer for a modification to the application requirements for a water quality impact assessment, described in this section.

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# Sec. 35-100. Water quality impact assessment review.

- (a) Submission and review. Submission and review requirements for the water quality impact assessment are as follows:
  - (1) Five copies of all site drawings and other applicable information as required by this article shall be submitted to the director for review by the SMRT.
- (2) All information required in this section shall be certified as complete and accurate by a professional engineer, architect, certified landscape architect or land surveyor licensed in Virginia pursuant to Article 1 (§54.1-400 et seq.) of Chapter 4 of Title 54.1 of the Code of Virginia.
- 1292 (3) As part of any water quality impact assessment submittal, the SMRT may require review
  1293 by the Northern Virginia Regional Commission or the Virginia Department of Environmental
  1294 Quality. Any comments will be incorporated into the final review by the SMRT, provided
  1295 that such comments are provided within 30 days of the request.
- 1296 (b) Evaluation. The evaluation procedure for the water quality impact assessment is as follows:
  - (1) Upon the completed review of a water quality impact assessment and the landscape conservation plan, the SMRT will determine if any proposed encroachment into the buffer area is consistent with the provisions of this article and make a recommendation to the director based on the following criteria:
    - a. The necessity of the proposed encroachment and the ability to place improvements elsewhere on the site to avoid disturbance of the buffer area;
    - b. Impervious surfaces are minimized;
    - c. Proposed mitigation measures, including the landscape conservation plan and site design, result in minimal disturbance to all components of the RPA, including the 100-foot buffer area:
    - d. Proposed mitigation measures will work to retain all buffer are functions, pollutant removal, erosion and runoff control;
    - e. Proposed best management practices, where required, achieve the requisite reductions in pollutant loadings;
    - f. The development as proposed, meets the purpose and intent of this division;
  - g. The cumulative impact of the proposed development, when considered in relation to other development in the vicinity, both existing and proposed, will not result in a significant degradation of water quality;
- h. Within any RPA, the proposed development is water-dependent or redevelopment; and
- i. The development will not result in significant disruption of the hydrology of the site.

- 1317 (2) The director shall require additional mitigation where potential impacts have not been 1318 adequately addressed. Evaluation of mitigation measures will be made based on the criteria 1319 listed in this subsection.
- 1320 (3) The director shall find the proposal to be inconsistent with the purpose and intent of this article when the impacts created by the proposal cannot be mitigated.

### Sec. 35-101. Erosion and sediment control plan.

- 1324 (a) *Plan contents*. The erosion and sediment control plan shall be of sufficient detail to
- demonstrate, to the satisfaction of the director, compliance with the provisions of section 35-102
- and with the Virginia Erosion and Sediment Control Handbook, whichever is more restrictive.
- The plan may be contained on a separate sheet or included with the drainage or grading plan
- submitted as a part of the development plans required in chapter 6, pertaining to buildings,
- chapter 28, pertaining to subdivisions, or chapter 48, pertaining to zoning.
- (b) Requirements for those preparing plans. The plan must be prepared and certified by a
- professional engineer, architect, certified landscape architect or land surveyor licensed in
- 1332 Virginia pursuant to Article 1 (§54.1-400 et seq.) of Chapter 4 of Title 54.1 of the Code of
- 1333 Virginia.
- 1334 (c) Agreement in lieu of a plan. Where a land disturbing activity results from the construction of
- a single-family residence, an agreement in lieu of a plan may be substituted for an erosion and
- sediment control plan if executed by the director.
- (d) Applicability to state agencies. Any state agency that undertakes a project involving a land
- disturbing activity shall have the erosion and sediment control plan approved by the Virginia Soil
- and Water Conservation Board or Virginia Department of Environmental Quality, as appropriate.
- (e) Applicability to multi-jurisdictional activities. Any person whose land disturbing activities
- involve lands which extend into the jurisdiction of another local erosion and sediment control
- program shall have either an erosion and sediment plan approved by the Virginia Soil and Water
- 1343 Conservation Board, or Fairfax County or Arlington County or the city. Such persons shall
- 1344 comply with the requirements of section 35-105 concerning an installation and maintenance
- agreement and bond.
- 1346 (f) Responsibility of owner of the land when activity is conducted by contractor. Whenever a
- land disturbing activity is proposed to be conducted by a contractor performing construction
- work pursuant to a construction contract, the preparation, submission and approval of the
- required erosion and sediment control plan shall be the responsibility of the owner of the land.
- 1350 (g) Wetland mitigation banks. In accordance with the procedure set forth in Code of Virginia,
- 1351 §10.1-563.E, any person engaging in the creation and operation of wetland mitigation banks in
- multiple jurisdictions, which have been approved and are operated in accordance with applicable
- 13.52 Interpretational state of the state of
- federal and state guidance, laws or regulations for the establishment, use and operation of
- mitigation banks pursuant to a permit issued by the state department of environmental quality,
- the marine resources commission or the U.S. Army Corps of Engineers, may at the option of that
- person, file general erosion and sediment control specifications for wetland mitigation banks
- annually with the Virginia Soil and Water Conservation Board for review and approval
- 1358 consistent with guidelines established by the Virginia Department of Environmental Quality.

1359 (h) Responsible land disturber. The responsible land disturber shall be designated prior to land 1360 disturbing activity. In addition, as a prerequisite to engaging in the land disturbing activities 1361 shown on the approved plan, the person responsible for carrying out the plan shall provide the 1362 name of an individual holding a certificate of competence to the program authority, as provided by Code of Virginia, §10.1-561, who will be in charge of and responsible for carrying out the 1363 1364 land disturbing activity. However, the director may waive the certificate of competence 1365 requirement for an agreement in lieu of a plan for construction of a single-family residence. If a 1366 violation occurs during the land disturbing activity, then the person responsible for carrying out 1367 the agreement in lieu of a plan shall correct the violation and provide the name of an individual 1368 holding a certificate of competence, as provided by Code of Virginia, §10.1-561. Failure to provide the name of an individual holding a certificate of competence prior to engaging in land 1369 1370 disturbing activities may result in revocation of the approval of the plan and the person 1371 responsible for carrying out the plan shall be subject to the penalties as provided in this article.

# Sec. 35-102. Erosion and sediment control technical standards.

- (a) Applicability of Virginia Erosion and Sediment Control Regulations. The more stringent of the erosion and sediment control performance standards contained in this section, or those contained in the Virginia Erosion and Sediment Control Regulations, 4VAC 50-30-40, shall apply to all applications for development, redevelopment, or land disturbance that will disturb 2,500 square feet of land or more. Such standards shall also apply to all applications for development, redevelopment, or land disturbance within RPAs, regardless of the amount of land disturbance.
- 1380 (b) Stabilization of denuded areas and soil stockpiles.

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- (1) Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. Temporary soil stabilization shall also be applied within seven days to denuded areas which may not be at final grade but will remain dormant (undisturbed) for longer than 30 days. Permanent soil stabilization shall be applied to areas that are to be left dormant for more than one year. Soil stabilization refers to measures which protect soil from the erosive forces of raindrop impact and flowing water. Applicable practices include vegetative establishment, mulching and the early application of gravel base on areas to be paved. Soil stabilization measures should be selected to be appropriate for the time of year, site conditions, and estimated duration of use.
- (2) During construction of the project soil stockpiles shall be sterilized or protected with sediment-trapping measures to prevent soil loss. The applicant is responsible for the temporary protection and permanent stabilization of all soil stockpiles on site as well as soil transported from the project site.
- 1394 (c) *Establishment of permanent vegetation*. A permanent and appropriate vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that, in the opinion of the director, is uniform enough to control soil erosion satisfactorily and to survive severe weather conditions.
- (d) *Protection of adjacent properties*. Properties adjacent to the site of a land disturbance shall be protected from sediment deposition. This may be accomplished by preserving a well-vegetated buffer strip around the lower perimeter of the land disturbance, by installing perimeter controls such as sediment barriers, filters, dikes, sediment basins or by a combination of such measures. Vegetated buffer strips may be used alone only where runoff in sheet flow is expected. Buffer

- strips should be at least 20 feet in width. If at any time it is found that a vegetated buffer strip
- alone is ineffective in stopping sediment movement onto adjacent property, additional perimeter
- 1406 controls must be provided.
- 1407 (e) Timing and stabilization of sediment-trapping measures. Sediment basins and traps,
- perimeter dikes, sediment barriers and other measures intended to trap sediment on-site must be
- 1409 constructed as a first step in grading and be made functional before upslope land disturbance
- takes place. Earthen structures such as dams, dikes and diversions must be seeded and mulched
- immediately after installation.
- 1412 (f) Sediment basins. Stormwater runoff from drainage areas with three acres or greater disturbed
- area must pass through a sediment basin. The sediment basin shall be designed and constructed
- to accommodate the anticipated sediment loading from the land disturbing activity. The outfall
- device or system design shall take into account the total drainage area flowing through the
- disturbed area to be served by the basin. The director may require sediment basins or traps for
- smaller disturbed areas where deemed necessary.
- 1418 (g) Cut and fill slopes. Cut and fill slopes must be designed and constructed in a manner which
- will minimize erosion. Consideration must be given to the length and steepness of the slope, the
- soil type, upslope drainage area, groundwater conditions and other applicable factors. Slopes
- which are found to be eroding excessively within one year of permanent stabilization must be
- provided with additional slope stabilizing measures until the problem is corrected. Any bond
- may be held until the expiration of one year after permanent stabilization is established or longer.
- if the director determines further stabilization or measures are required. The following guidelines
- are provided to aid site planners and plan reviewers in developing an adequate design:
- (1) Roughened soil surfaces are generally preferred to smooth surfaces on slopes.
- (2) Diversions should be constructed at the top of long, steep slopes which have significant
- drainage areas above the slope. Diversion or terraces may also be used to reduce slope
- length.
- (3) Concentrated stormwater should not be allowed to flow down cut or fill slopes unless
- 1431 contained within an adequate temporary or permanent channel, flume or slope drain
- structure.
- 1433 (4) Wherever a slope face crosses a water seepage plain which endangers the stability of the
- slope, adequate drainage or other protection should be provided.
- 1435 (h) Storm sewer inlet protection. All storm sewer inlets which are made operable during
- 1436 construction shall be protected so that sediment-laden water will not enter the conveyance
- system without first being filtered or otherwise treated to remove sediment.
- 1438 (i) Working in or crossing watercourses.
- (1) Construction vehicles should be kept out of watercourses to the extent possible. Where
- in-channel work is necessary, precautions must be taken to stabilize the work area during
- 1441 construction to minimize erosion. The channel (including bed and banks) must always be
- restabilized immediately after inchannel work is completed.
- 1443 (2) Where a live (wet) watercourse must be crossed by construction vehicles more than twice
- in any six-month period during construction, a temporary stream crossing constructed of
- nonerodible materials must be provided.

- 1446 (3) When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction. Nonerodible material shall be used for the construction of causeways and cofferdams. Earthen fill may be used for these structures if armored by nonerodible cover materials.
- 1451 (4) All applicable federal, state, and local regulations pertaining to working in or crossing live watercourses shall be met.
  - (5) The temporary crossing shall be removed as soon as possible and the stream shall be restored to its pre-development state, or to a condition of appropriate vegetation, as established by the director and the director.
- 1456 (j) *Underground utility construction*.

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- (1) The construction of nonexempt underground utility lines shall be subject to the following criteria:
  - a. No more than 100 feet of trench are to be opened at one time.
  - b. Where consistent with safety and space considerations, excavated material is to be placed on the uphill side of trenches.
  - c. Effluent from dewatering operations shall be filtered or passed through an approved sediment-trapping device, or both, and discharged in a manner that does not adversely affect flowing streams or off-site property.
  - d. Restabilization shall be accomplished in accordance with these regulations.
  - e. Applicable safety regulations shall be complied with.
- (2) Nonexempt utility construction includes the installation, maintenance or repair of all utilities which disturb more than 10,000 square feet except:
  - a. Individual service connections.
  - b. Underground public utility lines under existing hard-surfaced roads, streets or sidewalks, provided such land disturbing activity is confined to the area which is hard-surfaced.
- 1473 (k) *Construction access routes*. Wherever construction vehicle access routes intersect paved public roads, provisions must be made to eliminate the transport of sediment (mud) by runoff or vehicle tracking onto the paved surface. Where sediment is transported onto a public road
- surface, the roads shall be cleaned immediately and cleaned thoroughly at the end of each day.
- 1477 Sediment shall be removed from roads by shoveling or sweeping and be transported to a
- sediment controlled disposal area. Street washing shall be allowed only after sediment is
- removed in this manner. This provision shall apply to individual subdivision lots as well as to
- larger land disturbing activities.
- (1) Disposition of temporary measures. All temporary erosion and sediment control measures
- shall be disposed of within 30 days after final site stabilization is achieved or after the temporary
- measures are no longer needed, unless otherwise authorized by the director. Trapped sediment
- and other disturbed soil areas resulting from the disposition of temporary measures shall be
- permanently stabilized to prevent further erosion and sedimentation.
- (m) Maintenance. All temporary and permanent erosion and sediment control practices must be
- maintained, inspected, and repaired as needed to assure continued performance of their intended

function. A statement describing the maintenance responsibilities of the permittee shall be included in the approved erosion and sediment control plan.

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otherwise eroded.

- (1) The Virginia Erosion and Sediment Control Handbook, Second Edition, 1980, or current edition shall be used by any applicant making a submittal under this article and by the director in review and consideration of the adequacy of any erosion and sediment control plan submitted.
  - (2) This article and the Virginia Erosion and Sediment Control Handbook, Second Edition, 1980, or current edition shall be an integral part of the city's erosion and sediment control program and shall comprise the city's Erosion and Sediment Control Handbook.
- (n) *Dormant land use activities*. Should a land disturbing activity cease for more than 180 days, the director shall evaluate the existing approved erosion and sediment control plan to determine whether the plan still satisfies local and state erosion and sediment control criteria and to verify that all design factors are still valid. If the director finds the previously filed plan to be inadequate, a modified plan shall be submitted and approved prior to the resumption of land disturbing activity.
- 1503 (o) Exemptions for certain agricultural, horticultural, or forest management activities. Any 1504 person who owns, occupies, or operates private agricultural, horticultural, or forest lands shall 1505 not be deemed to be in violation of this article for land disturbing activities, which result from 1506 the tilling, planting, or harvesting of agricultural, horticultural or forest crops or products or 1507 engineering operations such as the construction of terraces, terrace outlets, check dams, desilting 1508 basins, floodwater retarding structures, channel improvements, floodways, dikes, ponds, ditches and the like; the utilization of strip cropping, lister furrowing; land drainage; land irrigation, 1509 1510 seeding and planting of waste, sloping, abandoned, or eroded lands and grasses; forestation and 1511 reforestation; rotation of crops; soil stabilization with trees, grasses, legumes, and other thick 1512 growing, soil holding crops; retardation of runoff by increasing absorption of rainfall; and 1513 retirement from cultivation of steep, highly erosive areas and areas now badly gullied or
- 1515 (p) *Exceptions and modifications*. The director may provide an exception or modification of the requirements of this section that are deemed inappropriate or too restrictive for site conditions.

  1517 Exceptions may be granted under these conditions:
  - (1) At the time of plan submission, an applicant may request a modification to become part of the approved erosion and sediment control plan. The applicant shall explain the reasons for requesting modifications in writing. Specific modifications which are allowed by the director shall be documented in the plan.
    - (2) During construction, the person responsible for implementing the approved plan may request a modification in writing from the director. The director shall respond in writing either approving or disapproving such a request. If the director does not approve a modification within ten days of receipt of the request, the request shall be considered to be disapproved. Following disapproval, the applicant may resubmit a modification request with additional documentation.
- 1528 (3) The director shall consider modification requests judiciously, keeping in mind both the 1529 need of the applicant to maximize cost effectiveness and the need to protect offsite properties 1530 and resources from damage.

1531 (4) The department of public works shall file a quarterly report on significant complaints
1532 filed under this section and on any modifications granted. The report shall summarize the
1533 complaint, the determination of the director on its merits, and any required corrective action.
1534 A copy of the quarterly report shall be transmitted to the planning director who shall transmit
1535 it to the planning commission.

## Sec. 35-103. Erosion and sediment control plan review.

- (a) *Plan review*. The director shall approve, within 60 days, the erosion and sediment control plan if such plan satisfies the following standards:
  - (1) The development plan shall be fitted to the topography and soils so as to create the least erosion potential.
  - (2) Wherever feasible, allowing for development permitted in the zoning district in which the land is situated, natural vegetation shall be retained and protected. If necessary to accomplish the purposes of this section, the director may increase the coverage restrictions contained in other sections of this chapter to the extent necessary to accomplish the purposes of this section.
  - (3) Provisions shall be made to effectively accommodate the increased runoff caused by changed soil and surface conditions during and after development.
  - (4) Sediment basins and similar structural measures shall be installed below high sediment-producing areas to remove sediment from runoff waters from land undergoing development. The owner or his agent shall make provision for regular inspection of these devices after every period of heavy rainfall; if more than 30 percent of the collecting volume is used up, the owner or agent shall cause accumulated silt to be removed therefrom.
  - (5) The plan shall establish the construction schedule and the sequence for installing protective measures and facilities and shall include provisions for the following:
    - a. The smallest practicable area of land shall be exposed at any one time through appropriate planning and sequential phasing at development.
    - b. All erosion and siltation control structures shall be placed prior to or as the first step in grading.
    - c. Special measures shall be provided to protect any disturbed area not paved, sodded or built upon by the November 1 in each year by seeding, mulching or other appropriate means.
  - (6) Conservation practices for erosion and sediment control shall equal or exceed the specifications of those contained in the Virginia Erosion and Sediment Control Handbook and any amendments thereto.
- (b) The director shall act on all plans submitted to it within 45 days from receipt thereof by either approving such plan in writing or by disapproving such plan in writing and giving the specific reasons for disapproval. When a plan submitted for approval, pursuant to this article, is found upon review by the director to be inadequate, the director shall specify such modifications, terms, and conditions as will permit approval of the plan and shall communicate these requirements to the applicant. If no action is taken by the director within the time specified in this section, the plan shall be deemed approved and the permit issued; provided, that the bond
- required in section 35-105 has been deposited.

- 1574 (c) *Plan modifications*. An approved plan may be changed by the director in the following cases:
- 1575 (1) Where inspection has revealed the inadequacy of the plan to accomplish the erosion and sediment control objectives of the plan, and appropriate modifications to correct the deficiencies of the plan are specified by the director; or
  - (2) Where the person responsible for carrying out the approved plan finds that because of changed circumstances or for other reasons the approved plan cannot be effectively carried out, and proposed amendments to the plan, consistent with the requirements of this article, are agreed to by the director and the person responsible for carrying out the plan.

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# Sec. 35-104. Landscape conservation plan.

- (a) All development, redevelopment, or land disturbance subject to this article shall include a landscape conservation plan. No stormwater management permit shall be approved without an approved landscape conservation plan. The landscape conservation plan shall include a scaled drawing, shall meet all of the requirements of this section, and shall be prepared and/or certified by a landscape architect, arborist, and/or horticulturalist.
- (b) *Preliminary vegetative survey*. The plan shall include a preliminary vegetative survey of all existing trees on the site, measuring at least two inches in DBH and shrubs that are greater than five feet in height. A chart shall be provided showing common and botanical name, size, condition, life expectancy, and required preservation measures of all woody vegetation. All trees
- shall be identified by an International Society of Arboriculture (ISA) certified arborist.
- 1594 (c) Existing vegetation preservation plan. The plan shall include an existing vegetation
  1595 preservation component that shall illustrate any grade changes or other work adjacent to trees
  1596 that would affect them adversely. Specifications shall be provided showing how grade, drainage
  1597 and aeration will be maintained around vegetation to be preserved to ensure the protection of
  1598 existing trees and other woody vegetation during clearing, grading and all phases of construction.
  - (1) Locations of tree preservation fencing, root pruning and other required tree preservation measures shall be shown on the plan.
  - (2) Proposed vegetation to be removed to create the desired construction footprint shall be clearly illustrated on the plan and labeled as "to be removed." Vegetation to be preserved outside the building envelope shall be shown on the plan and labeled as "to be preserved."
- 1604 (3) The location of the critical root zone (CRZ) of any vegetation shown on the plan or located on adjacent properties, including city rights-of-way, where the critical root zone (CRZ) extends onto the site, shall be shown on the plan.
- 1607 (4) Tree canopy coverage calculations provided by woody vegetation pre-development and post-development and/or redevelopment on the site shall be shown on the plan along with the driplines.
- 1610 (5) The City of Falls Church Tree Standards and Specifications for Planting shall be included on the plan.
- (6) Within the RPA buffer, trees and other woody vegetation to be removed for sight lines,
   vistas, access paths, best management practices, and shoreline stabilization projects shall be
   shown on the plan.

- (d) Landscape revegetation plan. The plan shall include a landscape revegetation component 1615
- 1616 that illustrates the proposed locations of vegetation that is required by this article and section 48-
- 1617 1180, tree canopy coverage required on residential lots zoned R1-A, low density and R1-B 1618 medium density.
- 1619 (1) A chart shall be provided listing canopy coverage calculations and any required 1620 replacement canopy coverage vegetation pursuant to section 48-1180, tree canopy coverage 1621 required on residential lots zoned R1-A, low density and/or R1-B medium density.
  - (2) A landscape schedule shall be provided that lists species, size, quantity, root condition and any credited tree canopy coverage pursuant to section 48-1180, shall be shown on the plan.
- 1625 (3) The planting of woody vegetation shall be in accordance with locally approved specifications and these specifications and details shall be included on the plan. 1626
- 1627 (4) Any required RPA buffer shall be clearly delineated and any woody vegetation to be 1628 added to establish, supplement or replace existing vegetation within the RPA buffer, as 1629 required under this Code, shall be shown on this plan.

# Sec. 35-105. Bonding requirements; installation and maintenance agreement.

- 1632 (a) When bonds and inspections required pertaining to site plans. All development, land 1633 disturbance, and redevelopment in an RPA or RMA shall be subject to the bond and inspection 1634 provisions, pursuant to sections 48-1143 and 48-1144, pertaining to site plans.
- 1635 (b) When bonds required pertaining to stormwater management permit. Prior to approval of a 1636 stormwater management permit, there shall be executed by the owner or his agent and submitted 1637 with the permit an agreement in form and substance as approved by the city to establish the 1638 measures provided for on the stormwater management plan and erosion and sediment control 1639 plan together with a cash bond to be deposited and held in escrow by the city, and no interest 1640 shall be paid by the city for any funds held in escrow. The agreement and bond shall be provided 1641 to ensure the installation, maintenance and performance of such measures. The bond shall be in 1642 the amount of the estimated cost of such measures as determined by certified cost estimates 1643 submitted by the applicant's engineer or land surveyor and approved by the director. The 1644 minimum amount of bond to be posted is to be \$750.00. In any case where the director rejects 1645 any such agreement or bond, the owner or agent of the owner may appeal from such decision 1646 first to the city manager and, if not resolved at that level, should then appeal to the city council;
- 1647 provided the owner or agent of the owner has paid to the city the required filing fee.
- 1648 (c) When bond released. After achieving the components required by the erosion and sediment
- 1649 control plan and stormwater management plan for which the city has issued a permit and 1650 received a bond as required by this section, the owner or agent of the owner may apply to the
- 1651 director in writing for a certificate of completion and discharge of the unexpended or unobligated
- 1652 portion of such bond. If the work is found by the director to conform to the approved plan
- 1653 provided for in section 35-92 and section 35-101 and other applicable regulations and city
- 1654 ordinances, such director shall issue the certificate and release of bond within 60 days of receipt 1655 of the application.
- 1656 (d) Stormwater management system maintenance. The owner of any component of the
- 1657 stormwater management system shall provide adequate maintenance to ensure that the system
- 1658 functions as designed.

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- (1) The owner shall enter into a maintenance agreement with the city that outlines facility-specific maintenance requirements. The maintenance agreement shall be set forth in an instrument recorded in the land records and shall provide all necessary provisions to ensure compliance with this section, including all necessary access to the property for the purposes of maintenance and regulatory inspections. Maintenance agreement forms shall be prepared in a format acceptable to the director and the city attorney.
  - (2) The maintenance agreement shall require that the owner prepare and submit an annual certification of maintenance to the city.
    - a. Certification shall be made by a registered engineer or licensed surveyor (qualified to perform such routine inspections) using a certification of maintenance form provided by the director. However, the director may specify that other individuals other than a registered engineer or licensed surveyor may provide certification at his discretion.
    - b. Such certification shall state the general condition of the facility and also state whether the infrastructure is functioning properly as originally designed.
    - c. If the facility is not functioning as designed, a plan for proposed remedial actions and a timeline for completion shall be noted in the certification report. The plan and timeline for completion are subject to the approval of the director. If the director determines that the proposed plan and timeline for completion is insufficient to protect the public health, safety, and welfare, the owner of the facility must either submit a new plan and timeline, or alternatively, the director may take action in accordance with section 35-109. Once remedial actions have been completed, the owner shall submit a new certification in accordance with this subsection.

#### Sec. 35-106. Appeals and hearings.

(a) Appeals.

- (1) Final decisions of the director under this article shall be in writing and be subject to review by the city manager. Any appeal shall be filed with the city manager within 30 days from the date of any written decision by the director that adversely affects the rights, duties, or privileges of the persons engaging in or proposing to engage in land disturbing activities.
- (2) All appeals must be written and must contain sufficient information to acquaint the city manager with the facts involved.
- (3) The city manager, as part of his review, will notify and seek advice and recommendations from appropriate boards and commissions. The city manager shall hear the appeal, and render a written decision within 30 working days of receipt of the notice of appeal. An appeal stays all compliance with the action being appealed, unless the director certifies to the city manager that by reason of stated facts a stay would, in the opinion of the director, cause imminent endangerment to life or property. In such cases, compliance shall not be stayed other than by a restraining order which may be granted by the city manager, or by a court of record, on application and on due cause shown.
- (4) A final decision of the city manager may be appealed to the city council, provided that a written appeal is filed with the city manager within 30 days after the date of his decision.
- (5) An appeal by any person aggrieved by any decision of the city council relative to the administration of this article shall be made to a court of record. An appeal shall be made

within 30 working days from the date of the issuance of the city council's written decision, by filing with a court of record.

## (b) *Hearings*.

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- (1) Any applicant, or person subject to this article aggrieved by any action of the city taken without a formal hearing, or by inaction of the city, may demand in writing a formal hearing by the city council, provided a petition requesting such hearing is filed with the director within 30 days after notice of such action is given by the director.
- (2) The hearings held under this section shall be conducted by the city council at a regular or special meeting of the city council or by at least one member of the city council designated by the city council to conduct such hearings on behalf of the city council at any other time and place authorized by the city council.
- (3) A verbatim record of the proceedings of such hearing shall be taken and filed with the city council. Depositions may be taken and read as in actions at law.
- (4) The city council or its designated member, as the case may be, shall have power to issue subpoenas and subpoenas duces tecum, and at the request of any party shall issue such subpoenas. The failure of a witness without legal excuse to appear or testify or to produce documents shall be acted upon by the town whose action may include the procurement of an order of enforcement from the circuit court. Witnesses who are subpoenaed shall receive the same fees and reimbursements for mileage as in civil actions.

# Sec. 35-107. Monitoring and inspections.

- 1723 (a) *General monitoring and inspection requirements*. The director shall inspect any land-1724 disturbing activity during construction for:
  - (1) Compliance with the approved stormwater management plan;
  - (2) Compliance with the approved erosion and sediment control plan;
- 1727 (3) Development, updating, and implementation of a stormwater pollution prevention plan and pollution prevention plan; and,
- 1729 (4) Development and implementation of any additional control measures necessary to address a TMDL.
- (b) Entry upon property; enforcement generally. The director may, at reasonable times and
- under reasonable circumstances, enter any establishment or upon any property, public or private, for the purpose of obtaining information or conducting surveys or investigations necessary in the
- 1734 enforcement of this article.
- 1735 (c) Entry upon property; failure to take action after proper notice. In accordance with a
- performance bond with surety, cash escrow, letter of credit, any combination thereof, or such
- 1737 other legal arrangement or instrument, the director may also enter any establishment or upon any
- property, public or private, for the purpose of initiating or maintaining appropriate actions which
- are required by the permit conditions associated with a land-disturbing activity when a permittee,
- after proper notice, has failed to take acceptable action within the time frame specified.
- 1741 (d) Furnishing materials, plans, specifications, etc. Pursuant to section 10.1-603.12:2 of the
- 1742 Code of Virginia, the director may require every stormwater management permit applicant or
- permittee, or any such person subject to the requirements of this article, to furnish when

- requested such application materials, plans, specifications, and other pertinent information as may be necessary to determine the effect of his discharge on the quality of state waters, or such
- other information as may be necessary to accomplish the purposes of this article.
- 1747 (e) Additional requirements for erosion and sediment control. The director may require at his
- sole discretion monitoring and reports from the person responsible for carrying out the erosion
- and sediment control plan, to ensure compliance with the approved plan and to determine
- whether the measures required in the plan are effective in controlling erosion and sediment. The
- owner, permittee, or person responsible for carrying out the plan shall be given notice of the
- inspection. If the director determines that there is a failure to comply with the plan, notice shall
- be served upon the permittee or person responsible for carrying out the plan by registered or
- 1754 certified mail to the address specified in the permit application or in the plan certification, or by
- delivery at the site of the land disturbing activities to the agent or employee supervising such
- activities. The notice shall specify the measures needed to comply with the plan and shall specify
- the time within which such measures shall be completed. Upon failure to comply within the time
- specified, the permit may be revoked and the permittee or person responsible for carrying out the
- plan shall be deemed to be in violation of this article and shall be subject to the penalties
- provided by section 35-109. The owner/occupant as operator shall be given an opportunity to
- accompany the inspector. The city shall be permitted to inspect the site at any time during the
- 1762 course of the project. Inspections are, at a minimum, to be made at the following times:
  - (1) Immediately following initial installation of erosion and sediment controls;
- 1764 (2) At least once in every two-week period;

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- (3) Within 48 hours following a runoff producing storm event; and
- (4) At the completion of the project prior to the release of any performance bonds.
- 1767 (f) *Post-construction inspection of stormwater management facilities*. The director shall, at reasonable times and under reasonable circumstances, inspect post-construction stormwater management facilities required under the provisions of this article on a schedule determined
- sufficient by the director except that such an inspection shall occur at least once every five years.

## Sec. 35-108. Prohibition against illicit discharges.

- 1773 (a) *Prohibited discharges*. It shall be unlawful to:
  - (1) Cause or allow illicit discharges to the stormwater management system or state waters;
- 1775 (2) Cause a connection to the stormwater management system that will or has the potential to allow for an illicit discharge to enter the system; or,
  - (3) Violate any permit granted for stormwater discharges.
- 1778 (b) *Discharges permitted by a VPDES or VSMP permit or waiver*. The prohibition in subsection (a) shall not apply to a discharge permitted under a VPDES or VSMP permit or waiver, provided that the discharge is in full compliance with all requirements of the VPDES or VSMP permit or waiver as well as any other applicable laws or regulations pertaining to the discharge.
- 1782 (c) Unpermitted or unapproved connections. Causing any new connection to the stormwater
- management system that is not approved in accordance with a stormwater management permit,
- or is not otherwise approved by the director if it is not part of a regulated land disturbing activity,
- shall be considered an illicit discharge for the purpose of this article.

- (d) *Erosion impact areas*. Any land identified by the director as an erosion impact area shall be considered to be contributing an illicit discharge and be required to submit for approval and implement an erosion and sediment control plan. This shall be required whether or not there is any construction activity on the site. The plan shall be prepared as specified in section 35-101.
  - (e) *Inspections and monitoring*. The director shall have the authority to inspect and monitor discharges and sources of potential discharges to the storm drainage system to ensure compliance with this article, including the authority to enter upon private property to inspect or monitor such discharges or sources of potential discharge. The director shall also have the authority to initiate enforcement action in accordance with section 35-109.

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# Sec. 35-109. Failure to comply; penalties and other legal actions.

- (a) Notice of violation; stop work orders; reimbursement of costs.
  - (1) In addition to all other remedies in this section, if the director determines that the stormwater management permit holder has failed to comply with any plan required under 35-94, the director shall immediately serve upon the permit holder, by registered or certified mail to the address specified by the permit holder in his permit application, a notice to comply. Such notice shall set forth specifically the measures needed to come into compliance with such plan or plans and shall specify the time within which such measures shall be completed. If the permit holder fails to comply within the time specified, he may be subject to revocation of the permit and/or the cash bond may be used by the city at the direction of the director to correct the noted deficiencies. Any person may file a complaint under this section. Upon receipt of a sworn complaint of a substantial violation of this section, the director may, in conjunction with or subsequent to a notice to comply as specified above, issue a stop work order requiring that all or part of the land disturbing activities permitted on the site be stopped until the specified corrective measures have been taken or, if land disturbing activities have commenced without an approved plan, as provided in section 35-91, requiring that all of the land disturbing activities be stopped until an approved plan or any required permits are obtained. Where the alleged noncompliance is causing or is in imminent danger of causing harmful erosion of lands or sediment deposition in waters within the watersheds of the Commonwealth, such an order may be issued whether or not the alleged violator has been issued a notice to comply as specified above. Otherwise, such an order may be issued only after the alleged violator has failed to comply with a notice to comply. The order shall be served in the same manner as a notice to comply, and shall remain in effect for seven days from the date of service pending application by the director or the alleged violator for appropriate relief to the circuit court. If the alleged violator has not obtained an approved plan or any required permits within seven days from the date of service of the order, the director may issue an order to the owner requiring that all construction and other work on the site, other than corrective measures, be stopped until an approved plan and any required permits have been obtained. Such an order shall be served upon the owner by registered or certified mail to the address specified in the permit application or the land records of the locality in which the site is located. The owner may appeal the issuance of an order to the circuit court. Any person violating or failing, neglecting or refusing to obey an order issued by the director may be compelled in a proceeding instituted in the circuit court to obey same and to comply therewith by injunction, mandamus, or other appropriate remedy. Upon

- 1830 completion and approval of corrective action or obtaining an approved plan or any required permits, the order shall immediately be lifted.
  - (2) If the city takes action upon failure to do so by the permittee, the city may collect from the permittee for the difference should the amount of the reasonable cost of such action exceed the amount of the surety held. Furthermore, he could be deemed to be in violation of this article and upon conviction could be subject to the penalties provided by this article.
  - (3) In the event that the violation of the approved landscape conservation plan was an encroachment or evidence of an encroachment into a tree preservation area, the applicant shall submit a mitigation plan subject to the approval of the director. This plan shall list remedial measures and the time within which such measures shall be completed by the applicant to ensure the continued preservation of the existing trees. This may include, but is not limited to, pruning, vertical mulching, and aerating. Bonding of the existing vegetation, in accordance with chapter 44, article II, division 5, may be required by the director.
  - (4) The director may require the replacement of any vegetation damaged in violation of the approved landscape conservation plan as part of the mitigation plan. The size, species and quantity of the replacement trees shall be calculated by the director based on the value of the trees removed as calculated by the latest formula published by the International Society of Arboriculture. The required replacement trees shall be included in the "mitigation plan" submitted by the applicant. Bonding of the replacement vegetation, in accordance with section 48-1143(b), may be required by the director.
  - (b) Failure to comply with stormwater management permit.

- (1) If the director determines that there is a failure to comply with the conditions of stormwater management permit conditions, notice shall be served upon the permittee or person responsible for carrying out the permit conditions by registered or certified mail to the address specified in the permit application, or by delivery at the site of the development activities to the agent or employee supervising such activities.
  - a. The notice shall specify the measures needed to comply with the permit conditions and shall specify the time within which such measures shall be completed. Upon failure to comply within the time specified, a stop work order may be issued in accordance with subsection b or the permit may be revoked by the director. The director may also pursue enforcement in accordance with this section.
  - b. If a permittee fails to comply with a notice issued in accordance with this section within the time specified, the director may issue an order requiring the owner, permittee, person responsible for carrying out an approved plan, or the person conducting the land-disturbing activities without an approved plan or required permit to cease all land-disturbing activities until the violation of the permit has ceased, or an approved plan and required permits are obtained, and specified corrective measures have been completed.

Such orders shall be issued in accordance with (local procedures). Such orders shall become effective upon service on the person by certified mail, return receipt requested, sent to his address specified in the land records of the locality, or by personal delivery by an agent of the director. However, if the director finds that any such violation is grossly affecting or presents an imminent and substantial danger of causing harmful erosion of lands or sediment deposition in waters within the watersheds of the Commonwealth or otherwise substantially impacting water quality, it may issue, without advance notice or

hearing, an emergency order directing such person to cease immediately all landdisturbing activities on the site and shall provide an opportunity for a hearing, after reasonable notice as to the time and place thereof, to such person, to affirm, modify, amend, or cancel such emergency order. If a person who has been issued an order is not complying with the terms thereof, the director may institute a proceeding for an injunction, mandamus, or other appropriate remedy in accordance with subsection 2.

- (2) In addition to any other remedy provided by this article, if the director or his or her designee determines that there is a failure to comply with the provisions of this article, they may initiate such informal and/or formal administrative enforcement procedures in a manner that is consistent with [reference local public facilities/engineering manual and/or specific policy].
- (3) Any person violating or failing, neglecting, or refusing to obey any rule, regulation, ordinance, order, or any permit condition issued by the director or any provisions of this article may be compelled in a proceeding instituted in any appropriate court by the town to obey same and to comply therewith by injunction, mandamus or other appropriate remedy.
- (c) Failure to comply with Chesapeake Bay preservation area requirements. In addition to any other penalties that may apply in this section, any person, whether as an owner, lessee, principal, agent, employee or otherwise, who violates any of the provisions of section 35-97 or section 35-98 or permits any such violation, or fails to comply with any of the requirements shall be subject to a civil penalty not to exceed \$2,500.00 for each violation. Each day upon which such violation continues shall constitute a separate violation. Furthermore, the director, through the city attorney, may apply to the circuit court of the county for injunctive relief to enjoin a violation or a threatened violation of this division.
- (d) Failure to comply with erosion and sediment control requirements. In addition to any other penalties that may apply in this section, the following additional penalties may be applied to a person who violates the provisions of section 35-101.
  - (1) Violators under this section shall be guilty of a class 1 misdemeanor.
  - (2) Any person who violates any regulation or order of the board, any condition of a permit, any provision of its program, or any provision of this article shall, upon a finding of an appropriate general district court, be assessed a civil penalty in accordance with the schedule listed under subsection (9) of this section. A civil action for such violation may be brought by the locality wherein the land lies. In any trial for a scheduled violation, it shall be the burden of the locality to show the liability of the violator by a preponderance of the evidence. An admission or finding of liability shall not be a criminal conviction for purpose. Any civil penalties assessed by a court shall be paid into the treasury of the locality wherein the land lies, except that where the violator is the locality itself, or its agent, the court shall direct the penalty to be paid into the state treasury.
- 1911 (3) The city may apply to the circuit court in any jurisdiction wherein the land lies to enjoin a violation or a threatened violation, under section 35-101, without the necessity of showing that an adequate remedy at law does not exist.
- (4) In addition to any criminal or civil penalties provided under this section, any person who violates any provision of this article may be liable to the program authority, or the board, as appropriate, in a civil action for damages.
- 1917 (5) Without limiting the remedies which may be obtained in this section, any person violating

- or failing, neglecting or refusing to obey any injunction, mandamus or other remedy obtained pursuant to this section shall be subject, in the discretion of the court, to a civil penalty not to exceed \$2,000.00 for each violation. A civil action for such violation or failure may be brought by the locality wherein the land lies. Any civil penalties assessed by a court shall be paid into the treasury of the locality wherein the land lies, except that where the violator is the locality itself, or its agent, the court shall direct the penalty to be paid into the state treasury.
  - (6) With the consent of any person who has violated or failed, neglected or refused to obey any regulation or order of the board, or any condition of a permit or any provision of this article, the board, the director or plan approving or permit issuing authority may provide, in an order issued by the board or plan approving or permit issuing authority against such person, for the payment of civil charges for violations in specific sums, not to exceed the limit specified in subsection (5) of this section. Such civil charges shall be instead of any appropriate civil penalty which could be imposed under subsection (2) or (5) of this section.
  - (7) Upon request of the city, the attorney for the commonwealth shall take legal action to enforce the provisions of this article. Upon request of the board, the attorney general shall take appropriate legal action on behalf of the board to enforce the provisions of this article.
    - (8) Compliance with the provisions of this article shall be prima facie evidence in any legal or equitable proceeding for damages caused by erosion or sedimentation that all requirements of law have been met and the complaining party must show negligence in order to recover any damages.
    - (9) Any violations of any regulation or order of the board, any provision of its program, any condition of a permit, or any provision of this article shall be subject to a civil penalty. The civil penalty for any one violation shall be not less than \$100.00, nor more than \$1,000.00. Each day during which the violation is found to have existed shall constitute a separate offense. In no event shall a series of specified violations arising from the same operative set of facts result in civil penalties which exceed a total of \$10,000.00 except that a series of violations arising from the commencement of land disturbing activities without an approved plan for any site shall not result in civil penalties which exceed a total of \$10,000.00. Adoption of such an ordinance providing that violations are subject to a civil penalty shall be in lieu of criminal sanctions and shall preclude the prosecution of such violation as a misdemeanor under subsection (1).
    - (10) Any person who violates any regulation or order of the board, any condition of a permit, any provision of its program, or any provision of this article shall, upon a finding of an appropriate general district court, be assessed a civil penalty in accordance with the schedule. A civil action for such violation may be brought by the locality wherein the land lies. In any trial for a scheduled violation, it shall be the burden of the locality to show the liability of the violator by a preponderance of the evidence. An admission or finding of liability shall not be a criminal conviction for any purpose. Any civil penalties assessed by a court shall be paid into the treasury of the locality wherein the land lies, except that where the violator is the locality itself, or its agent, the court shall direct the penalty to be paid into the state treasury.

- 1961 (a) Erosion and sediment control review and inspection fee. An erosion and sediment control
- review and inspection fee of \$100.00, plus \$20.00 per acre, or any fraction thereof, shall be paid
- to the city at the time of submission of plans to the director.

- 1964 (b) Stormwater management permit fee. A stormwater management permit fee shall be paid to
- the city at the time of submission for a stormwater management permit. No stormwater
- management permit shall be issued or effective until the fee is paid.
  - (1) Fees associated with an initial stormwater management permit issuance shall be in accordance with the table titled "Stormwater Management Fees Initial Permit Issuance." When a site or sites has been purchased for development within a previously permitted common plan of development or sale, the applicant shall be subject to fees in accordance with the disturbed acreage of their site or sites in the aforementioned table.
  - (2) Fees for the modification or transfer of general permit registration statements issued by the state board shall be imposed in accordance with the table titled "Stormwater Management Fees Modifications or Transfers." If the general permit modifications result in changes to stormwater management plans that require additional review by the city, such reviews shall be subject to the fees set out in the aforementioned table. The fee assessed shall be based on the total disturbed acreage of the site. In addition to the modification fee, modifications resulting in an increase in total disturbed acreage shall pay the difference in the initial permit fee paid and the permit fee that would have been applied for the total disturbed acreage in accordance with subsection (1).
  - (3) General permit coverage maintenance fees shall be paid annually to the city, by the anniversary date of general permit coverage, in accordance with the table titled "Stormwater Management Fees Permit Maintenance." No permit will be reissued or automatically continued without payment of the required fee. General permit coverage maintenance fees shall be applied until the permit coverage is terminated. Permit maintenance fees shall apply to expired permits that have been administratively continued.
  - (4) Persons whose coverage under the general permit has been revoked shall apply to the Virginia Department of Environmental Quality for an Individual Permit for Discharges of Stormwater from Construction Activities.
  - (5) Fees shall not be assessed to the following:
    - a. Permittees who request minor modifications to general permits as defined in section 35-89. Permit modifications at the request of the permittee resulting in changes to the stormwater management plan that require additional review by the director shall not be exempt pursuant to this subsection.
    - b. Permittees whose general permits are modified or amended at the initiative of the Virginia Department of Environmental Quality, excluding errors in the registration statement identified by the director or errors related to the acreage of the site.
  - (6) All incomplete payments will be deemed as nonpayments, and the applicant shall be notified of any incomplete payments. Interest shall be charged for late payments at the underpayment rate set forth in Code of Virginia §58.1-15 and is calculated on a monthly basis at the applicable periodic rate. A 10% late payment fee shall be charged to any delinquent account, defined as over 90 days past due. The city is entitled to all remedies under the Code of Virginia in collecting any past due amount.

STORMWATER MANAGEMENT FEES – INITIAL PERMIT ISSUANCE:	Total Fee	Portion Paid to DEQ <sup>1</sup>
Chesapeake Bay Preservation Act Land Disturbing Activity (sites equal to or greater than 2,500 SF and less than 1 acre within Chesapeake Bay Preservation Areas but not subject to General Permit coverage)	\$290	\$0
General/Stormwater Management – Small Activity (areas within common plans of development or sale with land disturbance acreage less than 1 acre)	\$290	\$81
General/Stormwater Management – Small Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 1 acre and less than 5 acres)	\$2,700	\$756
General/Stormwater Management – Large Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 5 acres and less than 10 acres)	\$3,400	\$952
General/Stormwater Management – Large Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 10 acres and less than 50 acres)	\$4,500	\$1,260
General/Stormwater Management – Large Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 50 acres and less than 100 acres)	\$6,100	\$1,708
General/Stormwater Management – Large Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 100 acres)	\$9,600	\$2,688
STORMWATER MANAGEMENT FEES – MODIFICATIONS OR TRANSFERS:	Total Fee	
General/Stormwater Management – Small Activity (areas within common plans of development or sale with land disturbance acreage less than 1 acre)	\$20	
General/Stormwater Management – Small Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 1 acre and less than 5 acres)	\$200	
General/Stormwater Management – Large Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 5 acres and less than 10 acres)	\$250	
General/Stormwater Management – Large Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 10 acres and less than 50 acres)	\$300	
General/Stormwater Management – Large Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 50 acres and less than 100 acres)	\$450	

General/Stormwater Management – Large Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 100 acres)	\$700
STORMWATER MANAGEMENT FEES – PERMIT MAINTENANCE:	Total Fee
Chesapeake Bay Preservation Act Land Disturbing Activity (sites equal to or greater than 2,500 SF and less than 1 acre within Chesapeake Bay Preservation Areas but not subject to General Permit coverage)	\$50
General/Stormwater Management – Small Activity (areas within common plans of development or sale with land disturbance acreage less than 1 acre)	\$50
General/Stormwater Management – Small Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 1 acre and less than 5 acres)	\$400
General/Stormwater Management – Large Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 5 acres and less than 10 acres)	\$500
General/Stormwater Management – Large Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 10 acres and less than 50 acres)	\$650
General/Stormwater Management – Large Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 50 acres and less than 100 acres)	\$900
General/Stormwater Management – Large Activity (sites or areas within common plans of development or sale with land disturbance acreage equal or greater than 100 acres)	\$1,400
<sup>1</sup> This is the portion of the total fee that is paid to the Virginia Department of completely administered by the Department such as may be the case for a staby individual state permits, the entire applicant fee shall be paid to the Department.	ate or federal project or projects covered
Secs. 35-11135-126. Reserved.	
[ATTACHEMENT 2 – All wording removed and merged into 0	Chapter 35, "Stormwater"]
Chapter 48 - ZONING	
ARTICLE IV DISTRICTS	
DIVISION 16 CBPA, CHESAPEAKE BAY PRESERY DISTRICT	VATION AREA OVERLAY
Sec. 48-824 Purpose.	

Sec. 48-825. - Overlay concept.

- 2019 Sec. 48-826. Authority.
- 2020 Sec. 48-827. Conflict with other regulations.
- 2021 **Sec. 48-828. Definitions.**
- 2022 Sec. 48-829. Areas of applicability.
- 2023 **Sec. 48-830. Use regulations.**
- 2024 Sec. 48-831. Lot size.
- 2025 Sec. 48-832. Chesapeake Bay preservation area designation.
- 2026 Sec. 48-833. Permitted development or uses, etc., within resource protection areas.
- 2027 Sec. 48-834. Performance and development criteria within Chesapeake Bay preservation
- 2028 **areas.**
- 2029 Sec. 48-835. Additional requirements for development within resource protection areas.
- 2030 Sec. 48-836. Application requirements for development projects Within RMAs.
- 2031 Sec. 48-837. Same Within RPAs.
- 2032 Sec. 48-838. Water quality impact assessment.
- 2033 Sec. 48-839. Installation and bonding requirements.
- 2034 Sec. 48-840. Administrative responsibility and procedure.
- 2035 Sec. 48-841. Administrative waivers and nonconformities, exemptions, and exceptions.
- 2036 Sec. 48-842. Appeals.
- 2037 Sec. 48-843. Violations and penalties; remedies.
- 2038 Secs. 48-844 48-866. Reserved.

2040 **Sec. 48-824. - Purpose.** 

2041 The purpose of the CBPA, Chesapeake Bay preservation area overlay district requirements 2042 in this division are to protect and improve the water quality of the Chesapeake Bay, its 2043 tributaries, and other state waters by minimizing the effects of human activity upon these waters. 2044 This division defines certain lands called Chesapeake Bay preservation areas, which, if 2045 improperly used or developed, may result in substantial damage to the water quality of the 2046 Chesapeake Bay and its tributaries. This division establishes criteria for the city to use in 2047 determining whether or not to grant, deny, or modify requests to rezone, subdivide, obtain 2048 grading permits, obtain building permits, or obtain an approved site plan in Chesapeake Bay 2049 preservation areas.

2050 (Code 1982, § 38-42(a); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 2051 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)

### 2052 **Sec. 48-825. - Overlay concept.**

The CBPA, Chesapeake Bay preservation area overlay district requirements in this division shall be in addition to and shall overlay all other zoning districts where they are applied so any parcel of land lying in the Chesapeake Bay preservation overlay district shall also lie in one or more of the other zoning districts provided for by the this chapter. Unless otherwise stated in the overlay district, the review and approval procedures provided for in the city zoning, site plan,

erosion and sediment control, and building permits administration shall be followed in reviewing and approving development, redevelopment, and uses governed by this article.

2060 (Code 1982, § 38-42(b); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 2061 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)

#### Sec. 48-826. - Authority.

The CBPA, Chesapeake Bay preservation area overlay district requirements in this division a authorized by the Chesapeake Bay Preservation Act, section 10.2100 et seq. and Code of Virginia, § 15.2-2283. Code of Virginia, § 15.2-2283 states that zoning ordinances may "also include reasonable provisions, not inconsistent with applicable state water quality standards, to protect surface water and groundwater as defined in Code of Virginia, § 62.1-255."

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(Code 1982, § 38-42(c); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)
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#### Sec. 48-827. - Conflict with other regulations.

In any case where the requirements for the CBPA, Chesapeake Bay preservation area overlay district of this division conflict with any other provision of this Code or existing state or federal regulations, whichever imposes the more stringent restrictions shall apply.

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(Code 1982, § 38-42(d); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)
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#### Sec. 48-828. - Definitions.

The following words and terms used within this division have the following meanings, unless the context clearly indicates otherwise. Words and terms not defined herein but defined in section 48-2 shall be given the meanings set forth therein.

Application for development within a Chesapeake Bay preservation area, Chesapeake Bay preservation area or CBPA means an application and process for reviewing compliance with this division, prior to any clearing and grading of a site and issuance of building permits.

Best management practices or BMPs means practices, determined by a state or designated area-wide planning agency to be the most effective, practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

Buffer area means an area of natural or established vegetation managed to protect other components of a resource protection area and state waters from significant degradation due to land disturbances.

Chesapeake Bay Interdisciplinary Review team means a team composed of city staff, to include a senior or principal planner from the development services department, the city engineer, and the city arborist.

Chesapeake Bay preservation area or CBPA means any land designated by the city pursuant to part III of the Chesapeake Bay preservation area designation and management regulations, 9VAC10-20-1970 et seq., and the Chesapeake Bay Preservation Act, section 10.1-2107, as a resource management area or resource protection area. A Chesapeake Bay preservation area shall consist of a resource protection area and a resource management area.

Critical root zone (CRZ) means the area beneath a tree that may extend well beyond the spread of its branches. The size of the critical root zone is a function of tree type, size, health and

it's response to construction stresses. The size of the critical root zone should be adjusted according to the specific factors listed in this definition and site conditions, but generally can be calculated as one foot per inch of diameter at breast height (DBH) of the tree to be preserved. For example, a ten-inch diameter at breast height tree would have a critical root zone of ten feet from the tree trunk in all directions.

Development means any alteration of the natural environment of improved and unimproved real estate which requires the application and approval of a site plan, subdivision plat or development plan related to regulated land disturbance activities and/or requiring permits, including, but not limited to, demolition, grading, filling, excavation, and building.

Diameter at breast height (DBH) means the diameter of the tree measured outside the bark at a point 4½ feet above the ground.

*Dripline* means a vertical projection to the ground surface from the furthest lateral extent of a tree or shrub's canopy.

Floodplain redevelopment means a relatively flat or low land area adjoining a river, stream, or watercourse, which is subject to partial or complete inundation. This is also an area subject to the unusual and rapid accumulation of runoff or surface waters from any source.

Impervious land cover means a surface composed of any material that significantly impedes or prevents natural infiltration of water into the soil. Impervious surfaces include, but are not limited to:

- 2119 (1) Nonvegetated roofs;
- 2120 (2) Buildings;
- 2121 (3) Streets;

- 2122 (4) Parking areas:
- 2123 (5) Sidewalks;
- 2124 (6) Driveways; and
- 2125 (7) Any concrete, asphalt, or compacted gravel surface.
- *Infill* means the utilization of vacant land in previously developed areas.

Land disturbing activity or land disturbance means any land change which, by affecting the contour of any lot, parcel or tract of land in any zoning district by grading, filling, excavating or the removal or destruction of a portion of the natural topsoil or trees or other vegetative cover, may result in soil erosion from water or wind and the movement of sediments into state water or onto lands in the state or city including, but not limited to, clearing, grading, excavating, and transporting and filling of land, other than state lands.

Nonpoint source pollution means pollution consisting of constituents such as sediment, nutrients, and organic and toxic substances from diffuse sources, such as runoff from agriculture and urban land development and use.

Nontidal wetlands means those wetlands, other than tidal wetlands, that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions, as defined by the U.S. Environmental Protection Agency, pursuant to section 404 of the Federal Clean Water Act, in 33 CFR 328.3b.

*Pervious land cover* means a surface composed of any material that allows for natural 2142 infiltration of water into the soil in varying degrees.

Public road means a publicly owned road designed and constructed in accordance with water quality protection criteria at least as stringent as requirements applicable to the state department of transportation, including regulations promulgated pursuant to:

- (1) The Erosion and Sediment Control Law (Code of Virginia, § 10.1-560 et seq.); and
- (2) The Virginia Stormwater Management Act (Code of Virginia, § 10.1-603.1 et seq.).

The term "public road" includes those roads where the state department of transportation exercises direct supervision over the design or construction activities, or both, and cases where secondary roads are constructed or maintained, or both, by the city in accordance with the city's standards

*Redevelopment* means the process of developing land that is developed or has been previously developed.

Resource management area or RMA means that component of the Chesapeake Bay preservation area that is not classified as the resource protection area. The term "resource management areas" includes land types that, if improperly used or developed, have the potential for causing significant water quality degradation or for diminishing the functional value of the resource protection area.

Resource protection area or RPA means that component of the Chesapeake Bay preservation area as defined in section 48-832(a). Resource protection areas consist of sensitive lands that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation to the quality of state waters.

Riparian Buffers Modification and Mitigation Guidance Manual means the Riparian Buffers Modification and Mitigation Guidance Manual, published in September 2003, written and published by the Chesapeake Bay Local Assistance Department. The intent of the manual is to provide guidance and clarification for tidewater local governments, at their request, regarding the section of the Chesapeake Bay Preservation Act describing buffer exemptions and modifications.

Shrub means any self-supporting woody plant which usually has multiple trunks. For preservation and canopy coverage calculation purposes, a shrub shall measure no less than five feet in height above ground level.

Substantial alteration means the expansion or modification of a building or development that would result in a disturbance of land exceeding an area of 2,500 square feet in the resource management area only.

Tree means any self-supporting woody plant which usually provides one main trunk and produces a more or less distinct and elevated head with many branches. For preservation purposes and canopy coverage calculation purposes, a tree shall measure no less than two inches in DBH.

*Tree canopy* means the branches, leaves, or other foliage from any tree measuring no less than two inches in DBH and shrubs measuring no less than five feet in height.

Tree canopy coverage means the area surrounding a tree or shrub located within the dripline.

*Use* means an activity on the land other than development including, but not limited to, commercial, residential, and industrial.

Water-dependent facility means a development of land that cannot exist outside of the resource protection area and must be located on the shoreline by reason of the intrinsic nature of its operation. The term "water-dependent facilities" includes, but is not limited to, the intake and outfall structures of water and sewer treatment plants and storm sewers, and public water oriented recreation areas.

Woody vegetation means and includes all trees and shrubs.

2190 (Code 1982, § 38-42(e); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)

Cross reference—Definitions and rules of construction, § 1-2.

## Sec. 48-829. - Areas of applicability.

The Chesapeake Bay preservation overlay district shall apply to all lands generally identified as resource protection areas and resource management areas, or collectively as CBPAs on the city CBPA map. The map, together with all explanatory matter thereon, is hereby adopted by reference and declared to be part of the official zoning district map and of this division. The CBPA map is a planning tool and shows the extent of the city's Chesapeake Bay preservation area as a whole, not the specific boundaries of the resource protection area or resource management area. As such, the map should be consulted by persons contemplating activities within the city prior to engaging in a regulated activity. Delineation of the boundaries of the resource protection area on a specific lot or parcel is the responsibility of the applicant as described in section 48-832(b).

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(Code 1982, § 38-42(f); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)
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## Sec. 48-830. - Use regulations.

Permitted uses, conditional uses, special use permits, accessory uses and special requirements shall be as established by the underlying zoning district, unless specifically modified by the requirements set forth in this division.

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(Code 1982, § 38-42(g); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)
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#### **Sec. 48-831. - Lot size.**

Lot size shall be subject to the requirements of the underlying zoning district, provided that any lot shall have sufficient area outside the RPA to accommodate an intended development, in accordance with the performance criteria in section 48-834, when such development is not otherwise allowed in the RPA.

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2217 (Code 1982, § 38-42(h); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)
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## Sec. 48-832. - Chesapeake Bay preservation area designation.

(a) Resource protection areas shall consist of lands described herein that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may cause significant degradation to the quality of state waters. The resource protection area shall consist of:

2224 (1) Nontidal wetlands connected by surface flow and contiguous to water bodies with perennial flow;

- (2) Such other lands considered by the city to meet some or all of the criteria described in subsection (a)(1) of this section, and considered to be necessary to protect the quality of state waters. Other lands to be included within the RPA are water bodies with perennial flow, all natural stream channels, and manmade open stream channels, as generally identified on the city's Chesapeake Bay preservation area (CBPA) map; and
- (3) A vegetated buffer area not less than 100 feet in width located adjacent to and landward of the components listed in subsections (a)(1) and (2) of this section, and along both sides of any water body with perennial flow.
- (b) Interpretation of resource protection area boundaries and delineation by the applicant. The city's adopted Chesapeake Bay preservation area (CBPA) map shows only the general location of the RPA and should be consulted by persons contemplating activities, modifications, or encroachments in the RPA. The specific boundaries of the RPA for each site or parcel shall be determined by the applicant as part of a water quality impact assessment, grading plan, demolition permit, building permit, site plan, subdivision plat, or any other application for land disturbance, and delineated on all submitted plans, subject to approval of the city engineer and in accordance with this division. The identification of resource protection area boundaries shall be established by a land surveyor authorized to practice in the commonwealth, and be based on reliable, scientifically valid, and specific information, as approved by the city engineer, from actual field evaluations of the site. The city CBPA map shall be used only as a guide to the general location of resource protection areas. The accuracy of the RPA boundary delineation submitted by the applicant, when in question, shall be verified by the city engineer.
- 2248 (c) Resource management area designation and interpretation of boundaries. Resource management areas shall include:
  - (1) Land types that, if improperly used or developed, have a potential for causing significant water quality degradation or for diminishing the functional value of the resource protection area.
  - (2) All land within the city corporate boundary that is not designated as a resource protection area.
- 2255 (Code 1982, § 38-42(i); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 2256 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)

# Sec. 48-833. - Permitted development or uses, etc., within resource protection areas.

- 2258 (a) Permitted development within RPAs. Land development may be allowed in the resource protection area, subject to the approval of the Chesapeake Bay Interdisciplinary Review Team (CBIRT), only if it falls into one of the following use categories and meets all related criteria and requirements of this section and those of the underlying zoning district:
  - (1) A new or expanded water-dependent facility may be allowed within a resource protection area provided that:
  - a. It does not conflict with the comprehensive plan;
- b. It complies with the performance criteria set forth in this section;

2266 c. Any nonwater-dependent component is located outside of resource protection 2267 areas; and 2268 d. Access will be provided with the minimum disturbance necessary. Where possible, 2269 a single point of access will be provided. 2270 (2) Redevelopment shall be permitted in the resource protection area only if there is no increase in the amount of impervious cover and no further encroachment within the 2271 2272 resource protection area, and it shall conform to the requirements contained herein, as 2273 well as erosion and sediment control requirements, and all applicable stormwater 2274 requirements of the city and other state and federal agencies. 2275 (3) Roads and driveways not exempt in section 48-841(d), must comply with the provisions 2276 of this section. However, they may be constructed in or across resource protection areas, 2277 if each of the following conditions is met: 2278 a. The Chesapeake Bay Interdisciplinary Review Team makes a finding that there are 2279 no reasonable alternatives to aligning the road or driveway in or across the resource 2280 protection area; 2281 b. The alignment and design of the road or driveway are optimized, consistent with 2282 other applicable requirements, to minimize encroachment in the resource protection 2283 area and adverse effects on water quality; 2284 c. The design and construction of the road or driveway satisfy all applicable criteria of 2285 this section, including submission of a water quality impact assessment; and 2286 d. The Chesapeake Bay Interdisciplinary Review Team reviews the plan for the road 2287 or driveway proposed in or across the resource protection area in coordination with 2288 an application for development within a CBPA. 2289 (4) Flood control and stormwater management facilities that drain or treat water from 2290 multiple development projects or from a significant portion of a watershed may be 2291 allowed in resource protection areas, provided that: 2292 a. The Chesapeake Bay Interdisciplinary Review Team has conclusively established that the location of the facility within the resource protection area is the optimum 2293 2294 location: 2295 b. The size of the facility is the minimum necessary to provide necessary flood control 2296 or stormwater treatment, or both; 2297 e. The facility must be consistent with a stormwater management program that has 2298 been approved by the Chesapeake Bay Local Assistance Board as a phase 1 2299 modification to the city's program; 2300 d. All applicable permits for construction in state or federal waters must be obtained 2301 from the appropriate state and federal agencies; 2302 e. Approval must be received from the city prior to construction; and 2303 f. Routine maintenance is allowed to be performed on such facilities to assure that 2304 they continue to function as designed.

It is not the intent of this division to allow a best management practice that collects and treats runoff from only an individual lot or some portion of the lot to be located within a resource protection area.

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- (b) Permitted modifications to resource protection area buffer areas. In order to maintain the functional value of the RPA buffer area, indigenous vegetation may be removed only as permitted by the city arborist to provide for reasonable sight lines, access paths, general woodlot management, and best management practices, including those that prevent upland erosion and concentrated flows of stormwater, as follows. All requests for vegetation removal shall be submitted in writing to the city arborist for evaluation.
  - (1) Trees may be pruned or removed as necessary subject to the written approval of the city arborist to provide for sight lines and vistas, provided that, where removed, they shall be replaced with other vegetation that is equally effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff.
  - (2) Any path shall be constructed and surfaced so as to effectively control erosion.
  - (3) Dead, diseased, or dying trees or shrubbery and noxious weeds (such as Johnson grass, kudzu, and multiflora rose) may be removed and thinning of trees may be allowed subject to the written approval of the city arborist, pursuant to sound horticultural practice incorporated into locally adopted standards.
  - (4) For shoreline erosion control projects, trees and woody vegetation may be removed, necessary control techniques employed, and appropriate vegetation established to protect or stabilize the shoreline in accordance with the best available technical advice and applicable permit conditions or requirements.
  - (c) Permitted encroachments into the buffer area.

- (1) When the application of the buffer area would result in the loss of a buildable area or a lot or parcel recorded prior to October 1, 1989, encroachments into the buffer area may be allowed by the Chesapeake Bay Interdisciplinary Review Team, through an administrative process, and in accordance with the following criteria:
  - a. Encroachments into the buffer area shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities;
  - b. Where practicable, a vegetated area that will maximize water quality protection, mitigate the effects of buffer encroachment, and is equal to the area of encroachment into the buffer area shall be established elsewhere on the lot or parcel; and
  - c. The encroachment shall not extend into the seaward 50 feet of the buffer area.
- (2) When the application of the buffer area would result in the loss of a buildable area on a lot or parcel recorded between October 1, 1989, and March 1, 2002, encroachments into the buffer area may be allowed by the Chesapeake Bay Interdisciplinary Review Team in accordance with the following criteria:
  - a. The lot or parcel was created as a result of a legal process conducted in conformity with the city's subdivision regulations;
  - b. Conditions or mitigation measures imposed through a previously approved exception shall be met;
  - c. If the use of a best management practice was previously required, the best management practice shall be evaluated to determine if it continues to function effectively, and if necessary, the best management practice shall be reestablished or repaired and maintained as required; and

d. The criteria in subsection (c)(1) of this section shall be met.

2352 (Code 1982, § 38-42(j); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 2353 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)

# 2354 Sec. 48-834. - Performance and development criteria within Chesapeake Bay preservation areas.

- (a) Purpose and intent. The following set of performance criteria establish the means to prevent a net increase in nonpoint source pollution from new development and achieve a ten percent reduction in nonpoint source pollution from redevelopment. These criteria also set standards to minimize erosion and sedimentation potential, reduce land application of nutrients and toxics, maximize rainwater infiltration, and ensure the longterm performance of the measures employed.
- (b) Criteria for development, redevelopment, or land disturbance. The following criteria apply to all applications for development, redevelopment, or land disturbance within RMAs for projects that will disturb 2,500 square feet of land or more. The criteria also apply to all applications for development, redevelopment, or land disturbance within RPAs, regardless of the amount of land disturbance.
  - (1) All development, redevelopment, or land disturbance within RMAs that exceeds 2,500 square feet of land disturbance and all development, redevelopment, or land disturbance in the RPA, regardless of the amount of land disturbance, shall be subject to a Chesapeake Bay preservation area review process. This process will begin at the time of applications for site plans, subdivision plats, grading plans, building permits, demolition permits, or water quality impact assessments, in accordance with applicable sections of this Code.
  - (2) Land disturbance shall be limited to the area necessary to provide for the proposed use or development. In accordance with an approved grading plan, the limits of land disturbance, including clearing or grading, shall be strictly defined. These limits shall be clearly shown on submitted plans and physically marked on the development site.
  - (3) Existing indigenous vegetation and trees shall be preserved to the maximum extent practicable, consistent with the proposed use or development, in accordance with chapters 14 and 44, pertaining respectively to environment and vegetation, and as follows.
    - a. Existing trees over two inches in DBH and shrubs greater than five feet in height shall be preserved outside the approved construction footprint consistent with subsection (b)(2) of this section. Diseased or weakened trees, by age, storm, fire or other injury, may be required to be removed, by the city arborist.
    - b. The regulation of any historic, specimen, street, park, memorial and other public trees shall be regulated in accordance with chapter 44, pertaining to vegetation. This may include the bonding of these types of trees in situations where the critical root zone (CRZ) or canopies extend onto the site.
    - c. Clearing shall be allowed only to provide necessary access, positive site drainage, water quality best management practices (BMPs) and the installation of utilities.

d. Tree preservation shall be in accordance with the City of Falls Church Tree
Preservation Standards and Specifications. A copy of the approved plan and the
specifications shall be kept on site at all times.

- e. Prior to clearing and grading, tree preservation fencing, consistent with the City of Falls Church Tree Preservation Standards and Specifications, signs, or other such material may be required by the city arborist. These preservation measures shall be installed to protect the critical root zone (CRZ) of any woody vegetation to be preserved on the site, as well as to protect the critical root zone (CRZ) of any woody vegetation trees on adjacent properties including rights-of-way that extend onto the site.
- f. Tree preservation fencing shall remain in place throughout all phases of construction. Fencing shall not be removed until all construction equipment has left the site and written approval is granted by the city arborist.
- g. Exceptions may be granted to allow access to the site and work area, with specific conditions established by the city arborist.
- h. The storage of equipment, materials, debris, or fill shall not be allowed within the enclosure of the tree preservation fencing.
- i. The applicant shall submit, in writing to the city arborist, a verification that all required tree preservation fencing and required preservation measures have been completed. The city arborist shall inspect and approve this verification, within three business days, prior to the issuance of any permits.
- (4) Natural ground cover, especially woody vegetation, shall be used to the extent that is practicable, as it is most effective in holding soil in place and preventing site erosion. Adaptability to local conditions without the use of harmful fertilizers or pesticides, and the ability to filter runoff, make the use of indigenous vegetation preferable to nonindigenous plantings.
- (5) Land development shall minimize impervious cover associated with the proposed use or development. Keeping impervious cover to a minimum enhances rainwater infiltration and effectively reduces stormwater runoff potential.
- (6) Where the best management practices (BMPs) utilized require regular or periodic maintenance in order to continue their functions, such maintenance shall be ensured by the city through a maintenance agreement with the owner or developer or some other mechanism that achieves an equivalent objective.
- (7) Notwithstanding any other provisions of this division or exceptions or exemptions, any land disturbing activity exceeding 2,500 square feet, including construction of all single-family houses, shall comply with the requirements of chapter 14 and section 48-1180, tree canopy coverage required on residential lots zoned R1-A, low density and R1-B, medium density.
- (8) The following stormwater quality/pollutant removal requirements shall be met within the RPA and RMA. However, only certain types of development, uses, land disturbances, or redevelopment are permitted in the RPA, as described in section 48-833(a), and as such, some of the following requirements may not be applicable. Additional requirements specific to the RPA are described in sections 48-835, 48-837, and 48-838

- a. Within the R-1A, low density residential, and R-1B, medium residential, zoning districts, a maximum impervious land cover of 35 percent is permitted with no other requirements for reducing pollutant load.
- b. Within the R-C, cluster residence; R-TH, townhouse residence; R-M, multifamily residence; T-1, transitional; B-1, limited business; B-2, central business; B-3, general business; O-D, official design; and M-1, light industry zoning districts:
  - 1. If the pre-development impervious land cover is less than or equal to 50 percent, the post-development pollutant load shall be reduced to a load that is not greater than the pre-development pollutant load. See sections 48-835, 48-837 and 48-838 for regulations pertaining to the RPA.
  - 2. If the pre-development impervious land cover is greater than 50 percent, the post-development pollutant load shall be reduced to 90 percent of the pre-development pollutant load. See sections 48-835, 48-837, and 48-838 for regulations pertaining to the RPA.
  - 3. In cases where pollutant load reduction is required, it shall be achieved through the application of best management practices, and the 2002, or most recently published version of the Virginia Stormwater Management Handbook, method for calculating pollution load shall be utilized to determine the appropriate measures
  - 4. The Chesapeake Bay interdisciplinary review team may waive or modify the pollutant load reduction requirement in cases where the sites originally incorporated best management practices for stormwater runoff quality control, provided the following provisions are satisfied:
    - (i) In no case may the post-development nonpoint source pollution runoff load exceed the pre-development load;
    - (ii) Runoff pollution loads must have been calculated and the BMPs selected for the expressed purpose of controlling nonpoint source pollution; and
    - (iii) If existing best management practices are structural, evidence shall be provided that facilities are currently in good working order and performing at the design levels of service. The Chesapeake Bay Interdisciplinary Review Team may require a review of both the original structural design and maintenance plans to verify this provision. A new maintenance agreement may be required to ensure compliance with this division.
  - 5. For redevelopment, both the pre-development and post-development loadings shall be calculated by the same procedures. However, where the design data is available, the original post-development nonpoint source pollution loadings can be substituted for the existing development loadings.
  - 6. The use of approved semipervious materials in lieu of impervious materials on a property may result in modified percentage impervious coverage calculations for that property. The city engineer will maintain a list of approved semipervious materials and the relative ratios of imperviousness, and will apply said ratios to the overall impervious calculation for the subject property.

2478 (9) Prior to initiating grading or other on site activities on any portion of a lot or parcel, all wetlands permits required by federal, state, and local laws and regulations, shall be obtained and evidence of such submitted to the city engineer as part of the required development application submittals.

All stormwater management options utilized shall comply with this division and shall also be in compliance with the city's adopted stormwater management plan. For the purposes of this section, the term "site" may include multiple projects that are adjacent to one another or lie within the same drainage area where a single best management practice will be utilized by those projects to satisfy water quality protection requirements.

(Code 1982, § 38-42(k); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)

# Sec. 48-835. - Additional requirements for development within resource protection areas.

In addition to the general performance and development criteria for CBPAs, the requirements in this section shall be met for any proposed land disturbance within an RPA.

- (1) Water quality. A water quality impact assessment shall be required for any proposed land disturbance, development, or redevelopment within RPAs, including any development projects that are permitted within the RPA, as well as any RPA buffer modification or encroachment, in accordance with the provisions of this division. See section 48-838 for specific water quality impact requirements.
- (2) Buffer area requirements. To minimize the adverse effects of human activities on the other components of the RPA, state waters, and aquatic life, a buffer area of vegetation that is effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff shall be retained, if present and established where it does not exist.
  - a. The buffer area shall be 100 feet wide and located adjacent to and landward of other RPA components and along both sides of any water body with perennial flow. This distance shall be measured from the top of the stream bank or the edge of stream if there is no bank. Notwithstanding permitted uses, encroachments, and vegetation clearing, as set forth in this division, the 100-foot-wide buffer area is never reduced in width.
  - b. The sections of water bodies for which the RPA shall be applied are generally labeled as such on the city's CBPA map. However, precise delineation of the 100-foot buffer area shall be prepared by the applicant, pursuant to this division.
  - c. The 100 foot buffer area shall be deemed to achieve a 75 percent reduction of sediments and a 40 percent reduction of nutrients. This must be demonstrated through the water quality impact assessment.
  - d. Where buffer areas are to be established, they shall consist of a mixture of shade trees, understory trees, shrubs and groundcovers. Density of the buffer shall be as described in the Riparian Buffers Modification and Mitigation Guidance Manual restoration and/or establishment tables.
  - e. Vegetation shall be chosen from the city recommended lists of trees and/or native floodplain species. Wetland plantings, including herbaceous plantings, and/or wetland seed mix shall be used where site conditions warrant. Plant materials and

2521 planting techniques shall be in accordance with The City of Falls Church Specifications for Planting.

2523 (Code 1982, § 38-42(l); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)

## Sec. 48-836. - Application requirements for development projects—Within RMAs.

- (a) Any applicant for development of land, redevelopment, or land disturbance within the city must file an application for development within a Chesapeake Bay reservation area with the city's department of environmental services. This will begin the city's process of review for development within these areas. These applications shall include the application form in addition to any required components of application for grading, stormwater, or building permits and the elements listed in section 48-838, if deemed necessary by the Chesapeake Bay Interdisciplinary Review Team, and a landscape conservation plan as described in subsection (b) of this section.
- (b) All development, redevelopment, or land disturbance subject to this division, Chesapeake Bay preservation area overlay district, shall also include a landscape conservation plan as part of plan review and approval. No clearing or grading of any lot shall be permitted without an approved landscape conservation plan prepared and/or certified by a landscape architect, arborist and/or horticulturalist. A landscape conservation plan shall be a scaled drawing including the following components:
  - (1) A preliminary vegetative survey of all existing trees on the site, measuring at least two inches in DBH and shrubs that are greater than five feet in height.
    - a. A chart shall be provided showing common and botanical name, size, condition, life expectancy, and required preservation measures of all woody vegetation.
    - b. All trees shall be identified by an International Society of Arboriculture (ISA) certified arborist.
  - (2) An existing vegetation preservation plan that shall illustrate any grade changes or other work adjacent to trees that would affect them adversely. Specifications shall be provided showing how grade, drainage and aeration will be maintained around vegetation to be preserved to ensure the protection of existing trees and other woody vegetation during clearing, grading and all phases of construction.
    - a. Locations of tree preservation fencing, root pruning and other required tree preservation measures shall be shown on the plan.
    - b. Proposed vegetation to be removed to create the desired construction footprint shall be clearly illustrated on the plan and labeled as "to be removed." Vegetation to be preserved outside the building envelope shall be shown on the plan and labeled as "to be preserved."
    - e. The location of the critical root zone (CRZ) of any vegetation shown on the plan or located on adjacent properties, including city rights-of-way, where the critical root zone (CRZ) extends onto the site, shall be shown on the plan.
    - d. Tree canopy coverage calculations provided by woody vegetation pre-development and post-development and/or redevelopment on the site shall be shown on the plan along with the driplines.

e. The City of Falls Church Tree Standards and Specifications for Planting shall be included on the plan.

- f. Within the RPA buffer, trees and other woody vegetation to be removed for sight lines, vistas, access paths, best management practices, and shoreline stabilization projects shall be shown on the plan.
- (3) A landscape revegetation plan that shall illustrate the proposed locations of vegetation that is required by this division and section 48-1180, tree canopy coverage required on residential lots zoned R1-A, low density and R1-B medium density.
  - a. A chart shall be provided listing canopy coverage calculations and any required replacement canopy coverage vegetation pursuant to section 48-1180, tree canopy coverage required on residential lots zoned R1-A, low density and/or R1-B medium density.
  - b. A landscape schedule shall be provided that lists species, size, quantity, root condition and any credited tree canopy coverage pursuant to section 48-1180, shall be shown on the plan.
  - c. The planting of woody vegetation shall be in accordance with locally approved specifications and these specifications and details shall be included on the plan.
  - d. Any required RPA buffer shall be clearly delineated and any woody vegetation to be added to establish, supplement or replace existing vegetation within the RPA buffer, as required under this Code, shall be shown on this plan.
- (4) In the event that any construction or work is performed in violation of the approved landscape conservation plan, the city arborist may issue a written notice to the responsible party to stop work. The notice to comply shall be immediately served upon the permit holder, by registered or certified mail to the address specified by the permit holder in his permit application. Such notice shall set forth specifically the measures needed to come into compliance with the plan and shall specify the time within which such measures shall be completed. If the permit holder fails to comply within the time specified, the permit holder may be subject to revocation of the permit and/or any cash bonds held by the city may be used at the direction of the city arborist to correct the noted deficiencies; furthermore, the permit holder could be deemed to be in violation of this division and upon conviction could be subject to the penalties provided by this division. Each notification that has not been resolved within the specified timeframe in the stop work order shall constitute a separate violation.
- (5) In the event that the violation of the approved landscape conservation plan was an encroachment or evidence of an encroachment into a tree preservation area, the applicant shall submit a mitigation plan subject to the approval of the city arborist. This plan shall list remedial measures and the time within which such measures shall be completed by the applicant to ensure the continued preservation of the existing trees. This may include, but is not limited to, pruning, vertical mulching, and aerating. Bonding of the existing vegetation, in accordance with chapter 44, article II, division 5, may be required by the city arborist.
- (6) The city arborist may require the replacement of any vegetation damaged in violation of the approved landscape conservation plan as part of the mitigation plan. The size, species and quantity of the replacement trees shall be calculated by the city arborist

based on the value of the trees removed as calculated by the latest formula published by the International Society of Arboriculture. The required replacement trees shall be included in the "mitigation plan" submitted by the applicant. Bonding of the replacement vegetation, in accordance with section 48-1143(b), may be required by the eity arborist.

2612 (Code 1982, § 38-42(m); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)

#### Sec. 48-837. - Same—Within RPAs.

Any applicant for development of land or land disturbance within a RPA must file an application for development within a Chesapeake Bay preservation area with the city's department of environmental services. This will begin the city's process of review for development within these special areas. These applications shall include the application form in addition to any required components of application for site plan, grading, subdivision, stormwater, or building permits and the elements listed in section 48-838, water quality impact assessment, and a landscape conservation plan as described in section 48-836.

(Code 1982, § 38-42(n); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)

# Sec. 48-838. - Water quality impact assessment.

- (a) When required. A water quality impact assessment shall be required for any:
  - (1) Proposed land disturbance, development or redevelopment activity within the resource protection area;
  - (2) Buffer encroachment, as provided for in section 48-833(c); and
  - (3) Other development in resource management areas if regarded as appropriate by the Chesapeake Bay Interdisciplinary Review Team due to unique site characteristics or the intensity of the proposed use or development and its potential impact on water quality.
- (b) Contents. The requirements for the water quality impact assessment will vary depending on the magnitude of the proposed development project.
  - (1) Identification of impacts with specificity. The purpose of the water quality impact assessment is to identify the impacts of proposed development, redevelopment, or land disturbance on water quality, lands within the resource protection area, and other environmentally sensitive lands, and to determine specific measures for mitigation of these impacts. The water quality impact assessment must be of sufficient specificity to demonstrate compliance with the criteria of this division. See section 48-835 for specific buffer requirements.
  - (2) Site drawing. A water quality assessment shall include a site drawing to scale which shows the following:
    - a. Location of the components of the RPA and the 100-foot buffer area measured from the top of the stream bank or edge of stream when there is no bank. The location of the RPA line shall be prepared and certified by a land surveyor authorized to practice in the commonwealth;
    - b. Location and nature of the proposed encroachment into the RPA buffer area, including:

2649	1. Type of paving material;
2650	2. Areas of clearing or grading;
2651	3. Location of any structures, drives, or other impervious cover; and
2652	4. Sewage disposal systems or other utilities;
2653 2654	c. Estimation of pre-development and post-development impervious surfaces on the site and stormwater calculations;
2655 2656 2657 2658 2659	d. Type and location of proposed best management practices to mitigate the proposed encroachment and the location of existing and proposed runoff outfalls or drainage pathways from the property, including the location of erosion and sediment control devices such as silt fencing, stormwater inlet protection, and temporary soil storage; and
2660 2661 2662	e. Pollutant load calculations to display that the vegetative buffer and/or best management practice will reduce the sediment load by 75 percent and nutrient load by 40 percent.
2663	(3) Modifications. Certain water quality impact requirements modifications are as follows:
2664 2665 2666 2667	a. Additional hydrogeological and other information may be required by the Chesapeake Bay Interdisciplinary Review Team if the size and scope of the proposed project is large enough to require additional analysis to ensure the protection of the CBPA.
2668 2669 2670 2671	b. Applicants for development and redevelopment of land or land disturbance within the RPA may apply, in writing, to the city engineer for a modification to the application requirements for a water quality impact assessment, described in this section.
2672	(4) Submission and review. Submission and review requirements are as follows:
2673 2674 2675	a. Five copies of all site drawings and other applicable information as required by this division shall be submitted to the city engineer for review by the Chesapeake Bay Interdisciplinary Review Team.
2676 2677	b. All information required in this division shall be certified as complete and accurate by a professional engineer or a certified land surveyor.
2678 2679 2680 2681 2682 2683	c. As part of any water quality impact assessment submittal, the Chesapeake Bay Interdisciplinary Review Team may require review by the Northern Virginia Regional Commission or the Chesapeake Bay Local Assistance Department. Any comments will be incorporated into the final review by the Chesapeake Bay Interdisciplinary Review Team, provided that such comments are provided within 30 days of the request.
2684	(5) Evaluation. The evaluation procedure is as follows:
2685 2686 2687 2688	a. Upon the completed review of a water quality impact assessment and the landscape conservation plan, the Chesapeake Bay Interdisciplinary Review Team will determine if any proposed encroachment into the buffer area is consistent with the provisions of this division and make a finding based upon the following criteria:
2689 2690	1. The necessity of the proposed encroachment and the ability to place improvements elsewhere on the site to avoid disturbance of the buffer area;

2691 2. Impervious surfaces are minimized;
2692 3. Proposed mitigation measures, including the landscape conservation plan and site design, result in minimal disturbance to all components of the RPA, including the 100-foot buffer area;

- 4. Proposed mitigation measures will work to retain all buffer are functions, pollutant removal, erosion and runoff control;
- 5. Proposed best management practices, where required, achieve the requisite reductions in pollutant loadings:
- 6. The development as proposed, meets the purpose and intent of this division;
- 7. The cumulative impact of the proposed development, when considered in relation to other development in the vicinity, both existing and proposed, will not result in a significant degradation of water quality;
- 8. Within any RPA, the proposed development is water-dependent or redevelopment; and
- 9. The development will not result in significant disruption of the hydrology of the site.
- b. The Chesapeake Bay Interdisciplinary Review Team shall require additional mitigation where potential impacts have not been adequately addressed. Evaluation of mitigation measures will be made based on the criteria listed in this subsection.
- c. The Chesapeake Bay Interdisciplinary Review Team shall find the proposal to be inconsistent with the purpose and intent of this division when the impacts created by the proposal cannot be mitigated.

(Code 1982, § 38-42(o); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)

## Sec. 48-839. - Installation and bonding requirements.

All development, land disturbance, and redevelopment in an RPA or RMA shall be subject to the bond and inspection provisions, pursuant to sections 48-1143 and 48-1144, pertaining to site plans.

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(Code 1982, § 38-42(p); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)
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#### Sec. 48-840. - Administrative responsibility and procedure.

Administration of the site plan process shall be in accordance with article V, division 7 of this chapter, pertaining to site plans, or chapter 38, pertaining to subdivision. The Chesapeake Bay Interdisciplinary Review Team (CBIRT) shall approve, approve subject to conditions, or disapprove any development application for property that is located within the city resource protection area and any development application for property within the city resource management area in accordance with this division. The CBIRT shall review and return the development plan review results to the applicant, including required conditions or modifications if the applicant wishes to proceed. If the applicant decides to proceed, the plans shall be modified by the applicant to reflect any required conditions or modifications and submitted for approval. The CBIRT will meet bimonthly. Public comment will be received at such meetings and outside of these meetings in writing. The CBIRT meetings will be advertised on the public notice boards

within city hall. Property owners within 150 feet of properties that are the subject of development applications to be reviewed by CBIRT will be mailed notification of applicable CBIRT meetings.

(Code 1982, § 38-42(q); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)

# Sec. 48-841. - Administrative waivers and nonconformities, exemptions, and exceptions.

- (a) Nonconforming structures. Any structure or nonagricultural use that was legally established in accordance with the provisions of this Code and was in existence on the date of the adoption of the ordinance from which this division is derived, and made nonconforming by operation of this division, may continue and be maintained, but shall not be enlarged or expanded, with the exception that the Chesapeake Bay Interdisciplinary Review Team may grant a waiver for structures on legal nonconforming lots or parcels to provide for remodeling and alterations to such nonconforming structures, provided there will be no increase in nonpoint source pollution load and any development or land disturbance exceeding an area of 2,500 square feet complies with all erosion and sediment control requirements in chapter 14, article IV. A nonconforming use development waiver shall become null and void if substantial work on the project has not commenced within 12 months of the date of permit issuance.
- (b) Reconstruction of preexisting structures. It is not the intent of this division to prevent the reconstruction of preexisting structures within Chesapeake Bay preservation areas from occurring as a result of casualty loss, unless otherwise restricted by city ordinance. Such reconstruction shall occur within two years after the destruction or damage and there shall be no increase in the amount of impervious area and no further encroachment into the RPA, to the extent possible by sound engineering practices.
- (c) Administrative waivers for the expansion of preexisting structures. An application for the expansion or modification of an existing legal principle structure on legal nonconforming lots or parcels may be approved by the Chesapeake Bay Interdisciplinary Review Team through an administrative process for additions to the existing legal principal structures, and additions of attached decks, garages, and other customary and incidental structures attached to the principal structure; provided the following findings are made:
  - (1) The request for the waiver is the minimum necessary to afford relief;
  - (2) Granting the waiver will not confer upon the applicant any specific privileges that are denied by this division to other property owners in similar situations;
  - (3) The waiver is in harmony with the purpose and intent of this division and does not result in a net increase in nonpoint source pollution load;
  - (4) The waiver is not based on conditions or circumstances that are self-created or self-imposed;
  - (5) Reasonable and appropriate conditions are imposed, as warranted, that will prevent the waiver from causing a degradation of water quality;
  - (6) Other findings, as appropriate and required by the city are met; and
- in no case shall this provision apply to accessory structures. Such requests shall be heard by the planning commission through the exceptions process described in subsection (e) of this section.
- 2775 (d) Exemptions for public utilities, railroads, public roads, and facilities.

- 2776 (1) Construction, installation, operation, and maintenance of electric, natural gas, fiber-2777 optic, and telephone transmission lines, railroads, and public roads and their appurtenant 2778 structures in accordance with:
  - a. Regulations promulgated pursuant to the Erosion and Sediment Control Law (Code of Virginia, § 10.1-560 et seq.) and the Stormwater Management Act (Code of Virginia, § 10.1-603.1 et seq.);
  - b. An erosion and sediment control plan and a stormwater management plan approved by the state department of conservation and recreation; or
  - c. Local water quality protection criteria at least as stringent as the above-state requirements will be deemed to constitute compliance with this division.
  - (2) The exemption of public roads and drives is further conditioned on the optimization of the road alignment and design, consistent with other applicable requirements, to prevent or otherwise minimize:
    - a. Encroachment in the resource protection area; and
    - b. Adverse effects on water quality.

- (3) Construction, installation and maintenance of water, sewer, natural gas, and underground fiber-optic telecommunications and cable television lines owned, permitted, or both, by the city or regional service authority shall be exempt from the criteria in this division; provided that:
  - a. To the degree possible, the location of such utilities and facilities should be outside resource protection areas;
  - b. No more land shall be disturbed than is necessary to provide for the proposed utility installation;
  - c. All such construction, installation and maintenance of such utilities and facilities shall be in compliance with all applicable state and federal permits and designed and conducted in a manner that protects water quality; and
  - d. Any land disturbance exceeding an area of 2,500 square feet complies with all erosion and sediment control requirements of this division.
- (4) Exemptions in resource protection areas. Passive recreation facilities such as boardwalks, trails and pathways; and historic preservation and archaeological activities may be exempt from the requirements of this division, as determined by the Chesapeake Bay Interdisciplinary Review Team; provided that any land disturbance exceeding an area of 2,500 square feet shall comply with the erosion and sediment control requirements of this division.
- (e) Exceptions in Chesapeake Bay preservation areas.
- (1) Requests for planning commission review. Requests for exceptions to the requirements of section 48-833, permitted development or uses, modifications, and encroachments within resource protection areas, and requests for exceptions to modify nonconforming, or construct new, nonattached accessory structures and uses in the RPA buffer, as noted in subsection (c) of this section, shall be made, in writing, to the city engineer. This request shall identify the impacts of the proposed exception on water quality and on lands within the resource protection area through the performance of a water quality

- impact assessment, which complies with the provisions of section 48-838. The Chesapeake Bay Interdisciplinary Review Team will forward the request and the water quality impact assessment to the planning commission for its consideration. The city shall notify the affected public of any such exception requests and the planning commission shall consider these requests in a public hearing in accordance with Code of Virginia, § 15.2-2204, except only one hearing shall be required.
  - (2) Request for administrative review. Requests for exceptions to provisions other than section 48-833, permitted development or uses, modifications, and encroachments within resource protection areas, and subsection (c) of this section. Exceptions to modify nonconforming, or construct new nonattached accessory structures and uses in the RPA buffer, may be made in writing to the city engineer for administrative review by the Chesapeake Bay Interdisciplinary Review Team, as described in section 48-840
  - (3) Evaluation criteria for administrative or planning commission review of exceptions as applied to subsections (e)(1) and (2) of this section. The Chesapeake Bay interdisciplinary review team or the planning commission shall review the request for an exception and the water quality impact assessment and may grant the exception with such conditions and safeguards as deemed necessary to further the purpose and intent of this division, and if the Chesapeake Bay Interdisciplinary Review Team or the planning commission finds that:
    - a. Granting the exception will not confer upon the applicant any special privileges denied by this division to other property owners in the overlay district;
    - b. The exception request is not based on conditions or circumstances that are self-created or self-imposed, nor does the request arise from conditions or circumstances either permitted or nonconforming that are related to adjacent parcels;
    - c. The exception request is the minimum necessary to afford relief;
    - d. The exception request will be in harmony with the purpose and intent of this division, not injurious to the neighborhood or otherwise detrimental to the public welfare, and is not of substantial detriment to water quality; and
    - e. Reasonable and appropriate conditions are imposed which will prevent the exception request from causing a degradation of water quality.

If the planning commission or Chesapeake Bay Interdisciplinary Review Team cannot make the required findings or refuses to grant the exception, the request for an exception together with the water quality impact assessment and the written findings and rationale for the decision shall be returned to the applicant.

(Code 1982, § 38-42(r); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)

## Sec. 48-842. - Appeals.

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(a) An appeal to the planning commission may be made by any person aggrieved by any decision of the city arborist, city engineer or Chesapeake Bay Interdisciplinary Review Team relative to the administration of this section. An appeal shall be made within 15 working days from the date of the issuance of the city arborist's, city engineer's or Chesapeake Bay Interdisciplinary Review Team's written order, by filing with the planning

director a notice of appeal specifying the grounds. The planning director shall then transmit to the planning commission the record upon which the appeal is based. The planning commission as part of their review should notify and seek advice and recommendations from appropriate boards and commissions all decisions by the planning commission can be appealed to a court of record. The planning commission shall hear the appeal, and render a written decision within 30 working days of receipt of the notice of appeal. An appeal stays all compliance with the action being appealed, unless the city arborist or city engineer certifies to the planning commission that by reason of stated facts a stay would, in the opinion of the city arborist or city engineer, cause imminent endangerment to life or property. In such cases, compliance shall not be stayed other than by a restraining order which may be granted by the city manager, or by a court of record, on application and on due cause shown.

(b) An appeal by any person aggrieved by any decision of the planning commission relative to the administration of this division shall be made to a court of record. An appeal shall be made within 30 working days from the date of the issuance of the planning commission's written decision, by filing with a court of record.

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(Code 1982, § 38-42(s); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)
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## Sec. 48-843. - Violations and penalties; remedies.

Any person, whether as an owner, lessee, principal, agent, employee or otherwise, who violates any of the provisions of this division or permits any such violation, or fails to comply with any of the requirements shall be subject to a civil penalty not to exceed \$2,500.00 for each violation. Each day upon which such violation continues shall constitute a separate violation. Furthermore, the city arborist and city engineer, through the city attorney, may apply to the circuit court of the county for injunctive relief to enjoin a violation or a threatened violation of this division.

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(Code 1982, § 38-42(t); Ord. No. 1335, 11-12-1990; Ord. No. 1380, 11-11-1991; Ord. No. 1748, 2-9-2004; Ord. No. 1766, 9-13-2004)
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Secs. 48-844—48-866. - Reserved.

[ATTACHEMENT 3 – All wording removed and merged into Chapter 35, "Stormwater"]

2895 CHAPTER 14 - ENVIRONMENT

#### ARTICLE IV. - EROSION AND SEDIMENT CONTROL

- **Sec. 14-88. Purpose.**
- **Sec. 14-89. Definitions.**
- 2900 Sec. 14-90. Requirements for engaging in land disturbing activity; bond; permit;
- **exceptions.**

- 2902 Sec. 14-91. Regulated land disturbing activities.
- 2903 Sec. 14-92. Plan required for issuance of permit.
- 2904 Sec. 14-93. Standards for approval of plan.
- 2905 Sec. 14-94. Installation and maintenance agreement; bond.
- 2906 Sec. 14-95. Failure to comply with plan.
- 2907 Sec. 14-96. Permit does not authorize changes in floodplain.
- 2908 Sec. 14-97. Review and inspection fee.
- 2909 Sec. 14-98. Administrative appeal; judicial review.
- 2910 Sec. 14-99. Penalties, injunctions and other legal actions; prima facie evidence of
- 2911 compliance.
- 2912 Secs. 14-100—14-126. Reserved.

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# 2914 **Sec. 14-88. - Purpose.**

The purpose of this article is to prevent the degradation of properties, stream channels, waters, and other natural resources by providing that adequate soil erosion and sediment control measures are taken before, during, and after the period of site clearance, development, and construction; and to implement the requirements of Code of Virginia, § 10.1-2100 et seq. (the Chesapeake Bay Preservation Act). The Erosion and Sediment Control Regulations of the Virginia Soil and Water Conservation Board, effective July 1, 1994, and as subsequently amended, are incorporated herein by reference. The text of these regulations is on file in the office of the director of public works.

(Code 1982, § 9-1; Ord. No. 718; Ord. No. 1412, 9-14-1992; Ord. No. 1530, 11-27-1995)

#### 2924 **Sec. 14-89. - Definitions.**

As used in this article, unless the context clearly indicates otherwise, the following words and phrases shall have the meanings ascribed to them by this section:

Adequate channel means a watercourse that will convey a chosen frequency storm event without overtopping its banks or causing erosive damage to the bed, banks, and overbank sections of the same.

Applicant means any person submitting an erosion and sediment control plan for approval or requesting the issuance of a permit, when required, authorizing land disturbing activities to commence.

Board refers to the Virginia Soil and Water Conservation Board.

Dam means a barrier to confine or raise water for storage or diversion, to create a hydraulic head, to prevent gully erosion, or to retain soil, rock or other debris.

Denuded refers to a term applied to land that has been physically disturbed and no longer supports vegetative cover.

Department refers to the Virginia Department of Conservation and Recreation.

Dike means an embankment to confine or control water, especially one built along the banks of a river to prevent overflow of lowlands; a levee.

Director of public works refers to the representative of the city who has been appointed to serve as the agent of the city in administering this article, or a duly appointed representative. As used in this article, the term "director" shall mean the director of public works.

Disturbed acreage means that portion of the project that will be disturbed, denuded, graded, cut, or filled.

*Diversion* means a channel with a supporting ridge on the lower side constructed across or at the bottom of a slope for the purpose of intercepting surface runoff.

Erosion and sediment control plan means a document containing material for the conservation of soil and water resources of a unit or group of units of land. It may include appropriate maps, an appropriate soil and water plan inventory and management information with needed interpretations, and a record of decisions contributing to conservation treatment. The plan shall contain all major conservation decisions to assure that the entire unit or units of land will be so treated to achieve the conservation objectives.

Erosion impact area means an area of land not associated with current land disturbing activity but subject to persistent soil erosion resulting in the delivery of sediment onto neighboring properties or into state waters. This definition shall not apply to any lot or parcel of land of 10,000 square feet or less used for residential purposes or to shorelines where the erosion results from wave action or other coastal processes.

#### Land disturbing activity.

- (1) The term "land disturbing activity" means any land change that may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the commonwealth, including, but not limited to, clearing, grading, excavating, transporting and filling of land.
- (2) The term "land disturbing activity" shall not include:
  - a. Minor land disturbing activities such as home gardens and individual home landscaping, repairs and maintenance work;
  - b. Individual service connections;
  - c. Installation, maintenance, or repair of any underground public utility lines when such activity occurs on an existing hard surfaced road, street or sidewalk provided the land disturbing activity is confined to the area of the road, street or sidewalk that is hard surfaced;
  - d. Septic tank lines or drainage fields unless included in an overall plan for land disturbing activity relating to construction of the building to be served by the septic tank system;
  - e. Surface or deep mining activities authorized under a permit issued by the department of mines, minerals and energy;
  - f. Exploration or drilling for oil and gas including the well site, roads, feeder lines and off-site disposal areas;
  - g. Tilling, planting, or harvesting of agricultural, horticultural, or forest crops, or livestock feedlot operations; including engineering operations as follows: construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds, ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing,

land drainage and land irrigation; however, this exception shall not apply to harvesting of forest crops unless the area on which harvesting occurs is reforested artificially or naturally in accordance with the provisions of Code of Virginia, § 10.1-1100 et seq., or is converted to bona fide agricultural or improved pasture use as described in Code of Virginia, § 10.1-1163 B;

- h. Repair or rebuilding of the tracks, right-of-way, bridges, communication facilities and other related structures and facilities of a railroad company;
- i. Agricultural engineering operations including but not limited to the construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds not required to comply with the provisions of the Dam Safety Act, Code of Virginia, § 10.1-604 et seq., ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing, land drainage and land irrigation;
- j. Disturbed land areas of less than 10,000 square feet in size; however, the governing body of the program authority may reduce this exception to a smaller area of disturbed land or qualify the conditions under which this exception shall apply;
- k. Installation of fence and sign posts or telephone and electric poles and other kinds of posts or poles;
- 1. Shoreline erosion control projects on tidal waters when all of the land disturbing activities are within the regulatory authority of and approved by local wetlands boards, the marine resources commission or the United States Army Corps of Engineers; however, any associated land that is disturbed outside of this exempted area shall remain subject to this article and the regulations adopted pursuant thereto; and
- m. Emergency work to protect life, limb or property, and emergency repairs; however, if the land disturbing activity would have required an approved erosion and sediment control plan, if the activity were not an emergency, then the land area disturbed shall be shaped and stabilized in accordance with the requirements of the plan-approving authority.

Local erosion and sediment control program refers to an outline of the various methods employed by a district or locality to regulate land disturbing activities and thereby minimize erosion and sedimentation in compliance with the state program and may include such items as local ordinances, policies and guidelines, technical materials, inspection, enforcement and evaluation.

Natural channel design concepts means the utilization of engineering analysis and fluvial geomorphic processes to create, rehabilitate, restore or stabilize an open conveyance system for the purpose of creating or recreating a stream that conveys its bankfull storm event within its banks and allows larger flows to access its bankfull bench and its floodplain.

Natural stream means nontidal waterways that are part of the natural topography. Natural streams usually maintain a continuous or seasonal flow during the year and are characterized as being irregular in cross section with a meandering course. Constructed channels such as drainage ditches or swales are not to be considered as natural streams.

Owner means the owner of the freehold of the premises or lesser estate, a mortgagee or vendee in possession, assignee of rents, receiver, executor, trustee, lessee or other person, firm or corporation in control of a property.

3027 Peak flow rate means the maximum instantaneous flow from a given storm condition at a 3028 particular location.

Person means any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, county, city, town, or other political subdivision of the commonwealth, any interstate body, or any legal entity.

Plan approving authority refers to the board, the district, or a city, or a department of a city, responsible for determining the adequacy of a conservation plan submitted for land disturbing activities on a unit of land and for approving plans. The term "plan approving authority" means the director of public works (or a designee) in the context of this article. Any plan approving authority shall be certified in soil and erosion control management by the state soil and water conservation division.

Predevelopment conditions refers to conditions at the time the erosion and sediment control plan is submitted to the plan approving authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time the erosion and sediment control plan for the initial phase is submitted for approval shall establish predevelopment conditions.

Runoff volume means the volume of water that runs off the land development project from a prescribed storm event.

Sediment basin means a depression formed from the construction of a barrier or dam built to retain sediment and debris.

Stabilized means an area that can be expected to withstand normal exposure to atmospheric conditions without incurring erosion damage.

State waters means all waters on the surface and under the ground wholly or partially within or bordering the commonwealth or within its jurisdiction.

Stormwater detention means the process of temporarily impounding runoff to reduce flood peaks.

Stormwater retention means the process by which an impoundment structure stores the total runoff of a given storm and then releases the flow at a controlled rate over an extended period.

Water quality volume means the volume equal to the first one-half inch of runoff multiplied by the impervious surface of the land development project.

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(Code 1982, § 9-2; Ord. No. 718; Ord. No. 1412, 9-14-1992; Ord. No. 1530, 11-27-1995)
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- 3059 Cross reference Definitions and rules of construction, § 1-2.
- 3060 State law reference Definitions, Code of Virginia, § 10.1-560.
- Sec. 14-90. Requirements for engaging in land disturbing activity; bond; permit; exceptions.

It shall be unlawful for any person to engage in land disturbing activities of 2,500 square feet or more until an erosion and sediment plan has been submitted to the director of public works, a bond posted, and a permit issued by the director of public works to the owner of the land involved or the agent of such owner. The following exceptions shall be granted unless the activity is within a Chesapeake Bay preservation area overlay district, wherein it shall comply with the provisions of chapter 48, article IV, division 16:

- 3069 (1) Such minor land disturbing activities as home gardens and individual home landscaping, repairs and maintenance work.
- 3071 (2) Individual service connections.

- 3072 (3) Installation, maintenance, or repair of any underground public utility lines when such activity occurs on an existing hard surfaced road, street or sidewalk provided the land disturbing activity is confined to the area of the road, street or sidewalk which is hard surfaced.
  - (4) Septic tank lines or drainage fields, unless included in an overall plan for land disturbing activity relating to construction of the building to be serviced by the septic tank system.
  - (5) Tilling, planting or harvesting of agricultural, horticultural or forest crops, livestock feedlot operations; however, this exception shall not apply to harvesting of forest crops unless the area on which harvesting occurs is reforested artificially or naturally in accordance with the provisions of Code of Virginia, § 10.1-1100 et seq., or is converted to bona fide agricultural or improved pasture use, as described in Code of Virginia, § 10.1-1163 B.
  - (6) Repair or rebuilding of the tracks, rights-of-way, bridges, communication facilities and other related structures and licensed public conveyances.
  - (7) Disturbed land areas for commercial or noncommercial uses to less than 2,500 square feet in size.
  - (8) Installation of fence and sign posts or telephone and electric poles and other kinds of posts or poles.
  - (9) Emergency work to protect life, limb or property, and emergency repairs. However, if the land disturbing activity would have required an approved erosion and sediment control plan, if the activity were not an emergency, then the land area disturbed shall be shaped and stabilized in accordance with the requirements of the plan approving authority.
  - (10) Surface or deep mining.
  - (11) Exploration or drilling for oil and gas, including the well site, roads, feeder lines and off-site disposal areas.
  - (12) Agricultural engineering operations, including but not limited to the construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds not required to comply with the provisions of the Dam Safety Act, article 2 of chapter 6 (Code of Virginia, § 10.1-604 et seq.), ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing, land drainage and land irrigation.
- 3104 (Code 1982, § 9-3; Ord. No. 718; Ord. No. 997, 2-8-1982; Ord. No. 1412, 9-14-1992; Ord. 3105 No. 1530, 11-27-1995)
- 3106 State law reference—Permits, Code of Virginia, § 10.1-565.
- 3107 Sec. 14-91. Regulated land disturbing activities.
- 3108 (a) Except as provided in subsections (b), (c) and (d) of this section, no person shall engage in any land disturbing activity until such person has submitted to the director of public works an erosion and sediment plan for such land disturbing activity and until that plan has been

- reviewed and approved by the director of public works, and the necessary bond has been posted pursuant to section 14-94 and a permit issued therefore pursuant to this article.
- 3113 (b) Any person who owns, occupies, or operates private agricultural, horticultural, or forest 3114 lands shall not be deemed to be in violation of this article for land disturbing activities, 3115 which result from the tilling, planting, or harvesting of agricultural, horticultural or forest crops or products or engineering operations such as the construction of terraces, terrace 3116 3117 outlets, check dams, desilting basins, floodwater retarding structures, channel improvements, floodways, dikes, ponds, ditches and the like; the utilization of strip 3118 3119 cropping, lister furrowing; land drainage; land irrigation, seeding and planting of waste, 3120 sloping, abandoned, or eroded lands and grasses; forestation and reforestation; rotation of 3121 crops; soil stabilization with trees, grasses, legumes, and other thick growing, soil holding 3122 crops; retardation of runoff by increasing absorption of rainfall; and retirement from 3123 cultivation of steep, highly erosive areas and areas now badly gullied or otherwise eroded.
- 3124 (c) Any state agency that undertakes a project involving a land disturbing activity shall have the erosion and sediment control plan approved by the state department of conservation and recreation and be in compliance with chapter 48, article IV, division 16, Chesapeake Bay preservation overlay district.
- 3128 (d) Any person whose land disturbing activities involve lands which extend into the jurisdiction of another local erosion and sediment control program shall have either an erosion and sediment plan approved by the state soil and water conservation board, or Fairfax County or Arlington County or the city. Such persons shall comply with the requirements of section 14-94 concerning an installation and maintenance agreement and bond.
- 3133 (e) Whenever a land disturbing activity is proposed to be conducted by a contractor performing construction work pursuant to a construction contract, the preparation, submission and approval of the required erosion and sediment control plan shall be the responsibility of the owner of the land.
- 3137 (f) Any land identified as an erosion impact area shall be required to submit a conservation plan
  3138 for approval. This shall be required whether or not there is any construction activity on the
  3139 site. The plan shall be prepared as specified in section 14-93
  - (g) In accordance with Code of Virginia, § 10.1-561, stream restoration and relocation projects that incorporate natural channel design concepts are not manmade channels and shall be exempt from any flow rate capacity and velocity requirements for natural or manmade channels.
  - (h) In accordance with Code of Virginia, § 10.1-561, any land disturbing activity that provides for stormwater management intended to address any flow rate capacity and velocity requirements for natural or manmade channels shall satisfy the flow rate capacity and velocity requirements for natural or manmade channels, if the practices are designed to:
    - (1) Detain the water quality volume and to release it over 48 hours;

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- (2) Detain and release over a 24-hour period the expected rainfall resulting from the one year, 24-hour storm; and
- (3) Reduce the allowable peak flow rate resulting from the 1.5-, two- and ten-year, 24-hour storms to a level that is less than or equal to the peak flow rate from the site, assuming it was in a good forested condition, achieved through multiplication of the forested peak flow rate by a reduction factor that is equal to the runoff volume from the site when it

- was in a good forested condition divided by the runoff volume from the site in its proposed condition, and shall be exempt from any flow rate capacity and velocity requirements for natural or manmade channels.
- 3158 (Code 1982, § 9-4; Ord. No. 718; Ord. No. 997, 2-8-1982; Ord. No. 1412, 9-14-1992; Ord. No. 1530, 11-27-1995)
- 3160 State law reference—Land disturbing activities, Code of Virginia, § 10.1-563.

# 3161 Sec. 14-92. - Plan required for issuance of permit.

- (a) A permit for grading, filling, excavating or altering shall be issued upon submission to and approval by the director of public works of a plan prepared and certified by a registered engineer or land surveyor in the state; provided, that the director of public works may require upon inspection additional or revised measures from time to time in the event originally approved measures prove to be inadequate. This plan may be contained on a separate sheet or included with the drainage or grading plan submitted as a part of the development plans required in chapter 6, pertaining to buildings, chapter 28, pertaining to subdivisions, or chapter 48, pertaining to zoning.
- (b) In accordance with the procedure set forth in Code of Virginia, § 10.1-563 E, any person engaging in the creation and operation of wetland mitigation banks in multiple jurisdictions, which have been approved and are operated in accordance with applicable federal and state guidance, laws or regulations for the establishment, use and operation of mitigation banks pursuant to a permit issued by the state department of environmental quality, the marine resources commission or the U.S. Army Corps of Engineers, may at the option of that person, file general erosion and sediment control specifications for wetland mitigation banks annually with the soil and water conservation board for review and approval consistent with guidelines established by the state department of conservation and recreation.
- (c) The responsible land disturber shall be designated prior to land disturbing activity. In addition, as a prerequisite to engaging in the land disturbing activities shown on the approved plan, the person responsible for carrying out the plan shall provide the name of an individual holding a certificate of competence to the program authority, as provided by Code of Virginia, § 10.1-561, who will be in charge of and responsible for carrying out the land disturbing activity. However, any plan approving authority may waive the certificate of competence requirement for an agreement in lieu of a plan for construction of a single-family residence. If a violation occurs during the land disturbing activity, then the person responsible for carrying out the agreement in lieu of a plan shall correct the violation and provide the name of an individual holding a certificate of competence, as provided by Code of Virginia, § 10.1-561. Failure to provide the name of an individual holding a certificate of competence prior to engaging in land disturbing activities may result in revocation of the approval of the plan and the person responsible for carrying out the plan shall be subject to the penalties as provided in this article.
  - (Code 1982, § 9-5; Ord. No. 178)
- 3194 State law reference Regulated land disturbing activities, Code of Virginia, § 10.1-563.

# Sec. 14-93. - Standards for approval of plan.

- 3196 (a) The director of public works shall approve, within 45 days, the plan referred to in section 3197 14-92 and issue the permit provided for in section 14-90, if such plan satisfies the following standards:
  - (1) The development plan shall be fitted to the topography and soils so as to create the least erosion potential.
  - (2) Wherever feasible, allowing for development permitted in the zoning district in which the land is situated, natural vegetation shall be retained and protected. If necessary to accomplish the purposes of this section, the director of public works may increase the coverage restrictions contained in other sections of this chapter to the extent necessary to accomplish the purposes of this section.
  - (3) Provisions shall be made to effectively accommodate the increased runoff caused by changed soil and surface conditions during and after development.
  - (4) Sediment basins and similar structural measures shall be installed below high sediment-producing areas to remove sediment from runoff waters from land undergoing development. The owner or his agent shall make provision for regular inspection of these devices after every period of heavy rainfall; if more than 30 percent of the collecting volume is used up, the owner or agent shall cause accumulated silt to be removed.
  - (5) The plan shall establish the construction schedule and the sequence for installing protective measures and facilities and shall include provisions for the following:
    - a. The smallest practicable area of land shall be exposed at any one time through appropriate planning and sequential phasing at development.
    - b. All erosion and siltation control structures shall be placed prior to or as the first step in grading.
    - c. Special measures shall be provided to protect any disturbed area not paved, sodded or built upon by the November 1 in each year by seeding, mulching or other appropriate means.
  - (6) Conservation practices for erosion and sediment control shall equal or exceed the specifications of those contained in the Virginia Erosion and Sediment Control Handbook and any amendments thereto.
  - (b) The director of public works shall act on all plans submitted within 45 days from receipt thereof by either approving such plan in writing or by disapproving such plan in writing and giving the specific reasons for disapproval. When a plan submitted for approval, pursuant to this article, is found upon review by the director of public works to be inadequate, the director of public works shall specify such modifications, terms, and conditions as will permit approval of the plan and shall communicate these requirements to the applicant. If no action is taken by the director of public works within the time specified in this section, the plan shall be deemed approved and the permit issued; provided, that the bond required in section 14-94 has been deposited.
  - (c) An approved plan may be changed by the director of public works which has approved the plan in the following eases:

- 3237 (1) Where inspection has revealed the inadequacy of the plan to accomplish the erosion and 3238 sediment control objectives of the plan, and appropriate modifications to correct the deficiencies of the plan are specified by the director of public works; or
  - (2) Where the person responsible for carrying out the approved plan finds that because of changed circumstances or for other reasons the approved plan cannot be effectively carried out, and proposed amendments to the plan, consistent with the requirements of this article, are agreed to by the director of public works and the person responsible for carrying out the plan.
  - (d) The state erosion and sediment control regulations minimum standards are:
    - (1) Stabilization of denuded areas and soil stockpiles.

- a. Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. Temporary soil stabilization shall also be applied within seven days to denuded areas which may not be at final grade but will remain dormant (undisturbed) for longer than 30 days. Permanent soil stabilization shall be applied to areas that are to be left dormant for more than one year. Soil stabilization refers to measures which protect soil from the erosive forces of raindrop impact and flowing water. Applicable practices include vegetative establishment, mulching and the early application of gravel base on areas to be paved. Soil stabilization measures should be selected to be appropriate for the time of year, site conditions, and estimated duration of use.
- b. During construction of the project soil stockpiles shall be sterilized or protected with sediment-trapping measures to prevent soil loss. The applicant is responsible for the temporary protection and permanent stabilization of all soil stockpiles on site as well as soil transported from the project site.
- (2) Establishment of permanent vegetation. A permanent and appropriate vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that, in the opinion of the director, is uniform enough to control soil erosion satisfactorily and to survive severe weather conditions.
- (3) Protection of adjacent properties. Properties adjacent to the site of a land disturbance shall be protected from sediment deposition. This may be accomplished by preserving a well-vegetated buffer strip around the lower perimeter of the land disturbance, by installing perimeter controls such as sediment barriers, filters, dikes, sediment basins or by a combination of such measures. Vegetated buffer strips may be used alone only where runoff in sheet flow is expected. Buffer strips should be at least 20 feet in width. If at any time it is found that a vegetated buffer strip alone is ineffective in stopping sediment movement onto adjacent property, additional perimeter controls must be provided.
- (4) Timing and stabilization of sediment trapping measures. Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment on-site must be constructed as a first step in grading and be made functional before upslope land disturbance takes place. Earthen structures such as dams, dikes and diversions must be seeded and mulched immediately after installation.

(5) Sediment basins. Stormwater runoff from drainage areas with three acres or greater disturbed area must pass through a sediment basin. The sediment basin shall be designed and constructed to accommodate the anticipated sediment loading from the land disturbing activity. The outfall device or system design shall take into account the total drainage area flowing through the disturbed area to be served by the basin. The director may require sediment basins or traps for smaller disturbed areas where deemed necessary.

- (6) Cut and fill slopes. Cut and fill slopes must be designed and constructed in a manner which will minimize erosion. Consideration must be given to the length and steepness of the slope, the soil type, upslope drainage area, groundwater conditions and other applicable factors. Slopes which are found to be eroding excessively within one year of permanent stabilization must be provided with additional slope-stabilizing measures until the problem is corrected. Any bond may be held until the expiration of one year after permanent stabilization is established or longer, if the director determines further stabilization or measures are required. The following guidelines are provided to aid site planners and plan reviewers in developing an adequate design:
  - a. Roughened soil surfaces are generally preferred to smooth surfaces on slopes.
  - b. Diversions should be constructed at the top of long, steep slopes which have significant drainage areas above the slope. Diversion or terraces may also be used to reduce slope length.
  - c. Concentrated stormwater should not be allowed to flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume or slope drain structure.
  - d. Wherever a slope face crosses a water seepage plain which endangers the stability of the slope, adequate drainage or other protection should be provided.
- (7) Stormwater management criteria for controlling off site erosion. Properties and waterways downstream from development sites shall be protected from erosion due to increases in the volume, velocity and peak flow rate of stormwater runoff and the following criteria shall apply:
  - a. Concentrated stormwater runoff leaving a development site must be discharged directly into a well-defined, natural or manmade, off-site receiving channel or pipe. For those sites where runoff is discharged into a pipe or pipe system, downstream stability analyses at the outfall of the pipe or pipe system shall be performed. Such analyses, related channel construction, and all associated costs shall be the responsibility of the property owner. If there is no well-defined, off-site receiving channel or pipe, one must be constructed to convey stormwater to the nearest adequate channel. Newly constructed channels and conduits carrying a flow of 1,000 or more cubic feet per second shall be designed for a 100-year storm frequency and newly constructed channels and conduits carrying a flow of less than 1,000 cubic feet per second shall be designed for a ten-year storm frequency and for a two-year storm to verify that stormwater will not cause erosion of the channel bed or banks. All hydrologic analyses shall be based on the existing watershed characteristics, and the ultimate developed condition of the subject property.

3323 1. An adequate channel shall be defined as a natural or manmade channel or pipe 3324 which is capable of conveying the runoff from a ten-year storm without 3325 overtopping its banks or eroding after development at the site in question. The 3326 channel shall also be checked with the two-year storm to verify that 3327 stormwater will not cause erosion of the channel bed or banks. A receiving 3328 channel may also be considered adequate at any point where the total 3329 contributing drainage area is at least 100 times greater than the drainage area of 3330 the development site in question, or where it can be shown that the peak rate of 3331 runoff from the site for a ten-year storm will not be increased after 3332 development. The runoff from the site for a two-year storm shall also be 3333 checked to verify that it will not be increased after development. 3334 2. Runoff rate and channel adequacy must be verified with engineering 3335 calculations to the satisfaction of the director. 3336 b. If an existing off-site receiving channel is not an adequate channel, the applicant 3337

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- must choose one of the following options:
  - 1. Obtain permission from downstream property owners to improve the receiving channel to an adequate condition. Such improvements shall extend downstream until an adequate channel section is reached;
  - 2. Develop a site design that will not cause the predevelopment peak runoff rate from a ten-year storm and also the two-year storm to increase. Such a design may be accomplished by enhancing the infiltration capability of the site or by providing on-site stormwater detention measures. The predevelopment and postdevelopment peak runoff rates must be verified by engineering calculations. Within the Four Mile Run Watershed postdevelopment peak runoff during a 100 year frequency storm shall not increase the peak runoff of the Four Mile Run Flood Control Channel as required by the city's contract with the United States Army Corps of Engineers. Within the remainder of the city, postdevelopment peak runoff shall be designed so as not to increase the peak flow in any critical downstream channel or culvert during a ten-year and two-year storm;
  - 3. Provide a combination of channel improvement, stormwater detention, retention or other measures which are satisfactory to the director or prevent downstream channel erosion:
  - 4. Improve the pipe or pipe system to a condition where the ten-year frequency storm is contained within the appurtenances.
- e. All channel improvements or modifications must comply with all applicable laws and regulations. Modifications to flowing steams should be made in accordance with Best Management Practices Handbook Hydrologic Modifications, Virginia State Water Control Board Planning Bulletin 319, 1979, or most recent edition.
- d. If the applicant chooses an option which includes stormwater detention, he must provide the city with a plan for maintenance of the detention facilities. The plan shall set forth the maintenance requirements of the facility and the party responsible for performing the maintenance. The responsible party may be an individual, organization, or the city, whichever has consented to carry out the maintenance. If

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- the designated maintenance responsibility is with an individual or organization other than the city, a maintenance agreement should be executed between the responsible party and the city.
- e. Increased volumes of unconcentrated sheet flows which will cause erosion or sedimentation on adjacent property must be diverted to a stable outlet or detention facility.
- f. In applying these stormwater management criteria, individual lots in subdivision developments shall not be considered separate development projects, but rather the subdivision development, as a whole, shall be considered a single development project. The following guidelines shall also apply:
  - 1. An erosion and sediment control plan shall be filed, as required in section 14-92, for a residential development and the buildings constructed within, regardless of the phasing of construction.
  - 2. If individual lots or sections in a residential development are being developed by different property owners, all land disturbing activities related to the building construction shall be covered by an erosion and sediment control plan or an agreement in lieu of a plan signed by the property owner.
  - 3. Land disturbing activity of less than 2,500 square feet on individual lots in a residential development shall not be considered exempt from the provisions of the Chesapeake Bay Preservation Act and these regulations.
  - 4. The construction of permanent roads or driveways that disturb in excess of 2,500 square feet and that serve more than one single family residence separately built is not exempt from the requirements of the Chesapeake Bay Preservation Act and these regulations.
- g. All stormwater calculations, routings, forms, and methods shall conform to the 1988 Fairfax County Public Facilities Manual, or most recent edition.
- (8) Stabilization of waterways and outlets. All on-site stormwater conveyance channels shall be designed and constructed to withstand the expected velocity of flow from a tenyear frequency storm without erosion. All channels must also be checked with the two-year storm to verify that the stormwater will not cause erosion of the channel bed or banks. Stabilization adequate to prevent erosion must also be provided at the outlets of all pipes and paved channels. Before newly constructed stormwater conveyance channels are made operational, adequate outlet protection and any required temporary or permanent channel lining shall be installed in both the conveyance channel and receiving channel. All plans must be approved by the director.
- (9) Storm sewer inlet protection. All storm sewer inlets which are made operable during construction shall be protected so that sediment laden water will not enter the conveyance system without first being filtered or otherwise treated to remove sediment.
- (10) Working in or crossing watercourses.
  - a. Construction vehicles should be kept out of watercourses to the extent possible. Where in-channel work is necessary, precautions must be taken to stabilize the work area during construction to minimize erosion. The channel (including bed and

3409 3410	banks) must always be restabilized immediately after in-channel work is completed.
3411 3412 3413	b. Where a live (wet) watercourse must be crossed by construction vehicles more than twice in any six-month period during construction, a temporary stream crossing constructed of nonerodible materials must be provided.
3414 3415 3416 3417 3418	c. When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction. Nonerodible material shall be used for the construction of causeways and cofferdams. Earthen fill may be used for these structures if armored by nonerodible cover materials.
3419 3420	d. All applicable federal, state, and local regulations pertaining to working in or crossing live watercourses shall be met.
3421 3422 3423	e. The temporary crossing shall be removed as soon as possible and the stream shall be restored to its predevelopment state, or to a condition of appropriate vegetation, as established by the director and the city arborist.
3424	(11) Underground utility construction.
3425 3426	a. The construction of nonexempt underground utility lines shall be subject to the following criteria:
3427	1. No more than 100 feet of trench are to be opened at one time.
3428 3429	2. Where consistent with safety and space considerations, excavated material is to be placed on the uphill side of trenches.
3430 3431 3432	3. Effluent from dewatering operations shall be filtered or passed through an approved sediment-trapping device, or both, and discharged in a manner that does not adversely affect flowing streams or off-site property.
3433	4. Restabilization shall be accomplished in accordance with these regulations.
3434	5. Applicable safety regulations shall be complied with.
3435 3436	b. Nonexempt utility construction includes the installation, maintenance or repair of all utilities which disturb more than 10,000 square feet except:
3437	1. Individual service connections.
3438 3439 3440	<ol> <li>Underground public utility lines under existing hard-surfaced roads, streets or sidewalks, provided such land disturbing activity is confined to the area which is hard-surfaced.</li> </ol>
3441 3442 3443 3444 3445 3446 3447 3448	(12) Construction access routes. Wherever construction vehicle access routes intersect paved public roads, provisions must be made to eliminate the transport of sediment (mud) by runoff or vehicle tracking onto the paved surface. Where sediment is transported onto a public road surface, the roads shall be cleaned immediately and cleaned thoroughly at the end of each day. Sediment shall be removed from roads by shoveling or sweeping and be transported to a sediment controlled disposal area. Street washing shall be allowed only after sediment is removed in this manner. This provision shall apply to individual subdivision lots as well as to lorger land disturbing activities.
3448 3449 3450	individual subdivision lots as well as to larger land disturbing activities.  (13) Disposition of temporary measures. All temporary erosion and sediment control measures shall be disposed of within 30 days after final site stabilization is achieved or

- after the temporary measures are no longer needed, unless otherwise authorized by the director. Trapped sediment and other disturbed soil areas resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion and sedimentation.
  - (14) *Maintenance*. All temporary and permanent erosion and sediment control practices must be maintained, inspected, and repaired as needed to assure continued performance of their intended function. A statement describing the maintenance responsibilities of the permittee shall be included in the approved erosion and sediment control plan.
    - a. The Virginia Erosion and Sediment Control Handbook, Second Edition, 1980, or current edition shall be used by any applicant making a submittal under this article and by the director in review and consideration of the adequacy of any erosion and sediment control plan submitted.
    - b. This article and the Virginia Erosion and Sediment Control Handbook, Second Edition, 1980, or current edition shall be an integral part of the city's erosion and sediment control program and shall comprise the city's Erosion and Sediment Control Handbook.
  - (15) Criteria for determining status of land disturbing activity.

- a. A property owner who disturbs 2,500 square feet, or more, of land and claims that the activity is exempted from the requirements of the Chesapeake Bay Preservation Act, as shown in Code of Virginia, § 10.1-560, shall have seven days from the date of commencement of the activity to demonstrate to the director that the activity is exempt. As soon as an exempt status is rejected, the requirements of the Chesapeake Bay Preservation Act shall be immediately enforced.
- b. Should a land disturbing activity cease for more than 180 days, the director shall evaluate the existing approved erosion and sediment control plan to determine whether the plan still satisfies local and state erosion and sediment control criteria and to verify that all design factors are still valid. If the director finds the previously filed plan to be inadequate, a modified plan shall be submitted and approved prior to the resumption of land disturbing activity.
- (e) Agencies authorized under any other law to issue grading, building or other permits for activities involving land disturbing activities may not issue any such permit unless the applicant submits with his application an approved erosion and sediment control plan and certification that the plan will be followed.
- 3484 (Code 1982, § 9-6; Ord. No. 718; Ord. No. 997, 2-8-1982; Ord. No. 1412, 9-14-1992; Ord. No. 1530, 11-27-1995)
- 3486 State law reference Approval of control plan, Code of Virginia, § 10.1-563.
- 3487 Sec. 14-94. Installation and maintenance agreement; bond.
- 3488 (a) Prior to approval of the plan, there shall be executed by the owner or his agent and submitted with the plan an agreement in form and substance as approved by the city to establish the measures provided for on the plan for the control of siltation and erosion, together with a cash bond to be deposited and held in escrow by the city, and no interest shall be paid by the city for any funds held in escrow. The agreement and bond shall be provided to ensure the installation, maintenance and performance of such measures. The

- bond shall be in the amount of the estimated cost of such measures as determined by certified cost estimates submitted by the applicant's engineer or land surveyor and approved by the director of public works. The minimum amount of bond to be posted is to be \$750.00. In any case where the director of public works rejects any such agreement or bond, the owner or agent of the owner may appeal from such decision first to the city manager and, if not resolved at that level, should then appeal to the city council; provided the owner or agent of the owner has paid to the city the required filing fee.
- (b) After achieving adequate stabilization of the work for which the city has issued a permit and received a bond as required by sections 14-90 and this section, the owner or agent of the owner may apply to the director of public works in writing for a certificate of completion and discharge of the unexpended or unobligated portion of such bond. If the work is found by the director of public works to conform to the approved plan provided for in section 14-92 and other applicable regulations and city ordinances, such director shall issue the certificate and release of bond within 60 days of receipt of the application.

(Code 1982, § 9-7; Ord. No. 718; Ord. No. 1412, 9-14-1992; Ord. No. 1530, 11-27-1995)

# Sec. 14-95. - Failure to comply with plan.

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(a) If the director of public works determines that the permit holder has failed to comply with the plan, the director of public works shall immediately serve upon the permit holder, by registered or certified mail to the address specified by the permit holder in his permit application, a notice to comply. Such notice shall set forth specifically the measures needed to come into compliance with such plan and shall specify the time within which such measures shall be completed. If the permit holder fails to comply within the time specified, he may be subject to revocation of the permit and/or the cash bond may be used by the city at the direction of the director of public works to correct the noted deficiencies. Any person may file a complaint under this section. Upon receipt of a sworn complaint of a substantial violation of this section, the director of public works may, in conjunction with or subsequent to a notice to comply as specified above, issue a stop work order requiring that all or part of the land disturbing activities permitted on the site be stopped until the specified corrective measures have been taken or, if land disturbing activities have commenced without an approved plan, as provided in section 14-93, requiring that all of the land disturbing activities be stopped until an approved plan or any required permits are obtained. Where the alleged noncompliance is causing or is in imminent danger of causing harmful erosion of lands or sediment deposition in waters within the watersheds of the Commonwealth, such an order may be issued whether or not the alleged violator has been issued a notice to comply as specified above. Otherwise, such an order may be issued only after the alleged violator has failed to comply with a notice to comply. The order shall be served in the same manner as a notice to comply, and shall remain in effect for seven days from the date of service pending application by the director or the alleged violator for appropriate relief to the circuit court. If the alleged violator has not obtained an approved plan or any required permits within seven days from the date of service of the order, the director of public works may issue an order to the owner requiring that all construction and other work on the site, other than corrective measures, be stopped until an approved plan and any required permits have been obtained. Such an order shall be served upon the owner by registered or certified mail to the address specified in the permit application or the land records of the locality in which the site is located. The owner may appeal the issuance of an order to the circuit court. Any

- person violating or failing, neglecting or refusing to obey an order issued by the director of public works may be compelled in a proceeding instituted in the circuit court to obey same and to comply therewith by injunction, mandamus, or other appropriate remedy. Upon completion and approval of corrective action or obtaining an approved plan or any required permits, the order shall immediately be lifted. Nothing in this section shall prevent the director from taking any other action specified in section 14-99
- 3545 (b) If the city takes conservation action upon failure to do so by the permittee, the city may collect from the permittee for the difference should the amount of the reasonable cost of such action exceed the amount of the surety held. Furthermore, he could be deemed to be in violation of this article and upon conviction could be subject to the penalties provided by this article.
- 3550 (Code 1982, § 9-8; Ord. No. 718; Ord. No. 1412, 9-14-1992; Ord. No. 1530, 11-27-1995)

#### Sec. 14-96. - Permit does not authorize changes in floodplain.

Approval of the plan shall not be construed to authorize the construction of any structure within the floodplain or to authorize any filling, grading or other change of the contour of such floodplain area without such permit, authorization or approval as may be required by this article.

(Code 1982, § 9-9; Ord. No. 718)

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### Sec. 14-97. - Review and inspection fee.

- (a) An erosion and sediment control review and inspection fee of \$100.00, plus \$20.00 per acre, or any fraction thereof, shall be paid to the city at the time of submission of plans to the director of public works.
- (b) The director shall provide for periodic inspections of the land disturbing activity to ensure compliance with approved plans and/or this article, and may require (at the option of the director) monitoring and reports from the person responsible for carrying out the plan, to ensure compliance with the approved plan and to determine whether the measures required in the plan are effective in controlling erosion and sediment. The owner, permittee, or person responsible for carrying out the plan shall be given notice of the inspection. If the permit issuing authority or plan approving authority determines that there is a failure to comply with the plan, notice shall be served upon the permittee or person responsible for carrying out the plan by registered or certified mail to the address specified in the permit application or in the plan certification, or by delivery at the site of the land disturbing activities to the agent or employee supervising such activities. The notice shall specify the measures needed to comply with the plan and shall specify the time within which such measures shall be completed. Upon failure to comply within the time specified, the permit may be revoked and the permittee or person responsible for carrying out the plan shall be deemed to be in violation of this article and shall be subject to the penalties provided by section 14-99. The owner/occupant as operator shall be given an opportunity to accompany the inspector. The city shall be permitted to inspect the site at any time during the course of the project. Inspections are, at a minimum, to be made at the following times:
- 3578 (1) Immediately following initial installation of erosion and sediment controls;
- 3579 (2) At least once in every two-week period;
- 3580 (3) Within 48 hours following a runoff producing storm event; and
- 3581 (4) At the completion of the project prior to the release of any performance bonds.

3582 (Code 1982, § 9-10; Ord. No. 718; Ord. No. 997, 2-8-1982; Ord. No. 1412, 9-14-1992; Ord. No. 1530, 11-27-1995)

# Sec. 14-98. - Administrative appeal; judicial review.

- (a) Final decisions of the city, under this article, shall be subject to review by the city manager and if desirable by the city council, provided an appeal is filed within 30 days from the date of any written decision by the director of public works which adversely affects the rights, duties or privileges of the person engaging in or proposing to engage in land disturbing activities.
- 3590 (b) Final decisions of city council, under this article, shall be subject to review by the Circuit Court of Arlington County, provided an appeal is filed within 30 days from the date of the final written decision which adversely affects the rights, duties or privileges of the person engaging in or proposing to engage in land disturbing activities.
  - (c) The director of public works may waive or modify any of the regulations that are deemed inappropriate or too restrictive for site conditions, by granting a modification. A modification may be granted under these conditions:
    - (1) At the time of plan submission, an applicant may request a modification to become part of the approved erosion and sediment control plan. The applicant shall explain the reasons for requesting modifications in writing. Specific modifications which are allowed by the director shall be documented in the plan.
    - (2) During construction, the person responsible for implementing the approved plan may request a modification in writing from the director. The director shall respond in writing either approving or disapproving such a request. If the director does not approve a modification within ten days of receipt of the request, the request shall be considered to be disapproved. Following disapproval, the applicant may resubmit a modification request with additional documentation.
    - (3) The director shall consider modification requests judiciously, keeping in mind both the need of the applicant to maximize cost effectiveness and the need to protect off-site properties and resources from damage.
    - (4) The department of public works shall file a quarterly report on significant complaints filed under this section and on any modifications granted. The report shall summarize the complaint, the determination of the department of public works on its merits, and any required corrective action. A copy of the quarterly report shall be transmitted to the planning director who shall transmit it to the planning commission.

(Code 1982, § 9-11; Ord. No. 718; Ord. No. 1412, 9-14-1992)

# Sec. 14-99. - Penalties, injunctions and other legal actions; prima facie evidence of compliance.

- (a) Violators of this article shall be guilty of a class 1 misdemeanor.
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  (b) Any person who violates any regulation or order of the board, any condition of a permit, any provision of its program, or any provision of this article shall, upon a finding of an appropriate general district court, be assessed a civil penalty in accordance with the schedule listed under subsection (i) of this section. A civil action for such violation may be brought by the locality wherein the land lies. In any trial for a scheduled violation, it shall be the burden of the locality to show the liability of the violator by a preponderance of the

- evidence. An admission or finding of liability shall not be a criminal conviction for purpose.

  Any civil penalties assessed by a court shall be paid into the treasury of the locality wherein the land lies, except that where the violator is the locality itself, or its agent, the court shall direct the penalty to be paid into the state treasury.
- 3629 (c) The city or the board may apply to the circuit court in any jurisdiction wherein the land lies to enjoin a violation or a threatened violation, under sections 14-91 and 14-97, without the necessity of showing that an adequate remedy at law does not exist.

- (d) In addition to any criminal or civil penalties provided under this article, any person who violates any provision of this article may be liable to the program authority, or the board, as appropriate, in a civil action for damages.
  - (e) Without limiting the remedies which may be obtained in this section, any person violating or failing, neglecting or refusing to obey any injunction, mandamus or other remedy obtained pursuant to this section shall be subject, in the discretion of the court, to a civil penalty not to exceed \$2,000.00 for each violation. A civil action for such violation or failure may be brought by the locality wherein the land lies. Any civil penalties assessed by a court shall be paid into the treasury of the locality wherein the land lies, except that where the violator is the locality itself, or its agent, the court shall direct the penalty to be paid into the state treasury.
  - (f) With the consent of any person who has violated or failed, neglected or refused to obey any regulation or order of the board, or any condition of a permit or any provision of this article, the board, the director or plan approving or permit issuing authority may provide, in an order issued by the board or plan approving or permit issuing authority against such person, for the payment of civil charges for violations in specific sums, not to exceed the limit specified in subsection (e) of this section. Such civil charges shall be instead of any appropriate civil penalty which could be imposed under subsection (b) or (e) of this section.
  - (g) Upon request of a program authority, or the permit issuing authority, the attorney for the commonwealth shall take legal action to enforce the provisions of this article. Upon request of the board, the attorney general shall take appropriate legal action on behalf of the board to enforce the provisions of this article.
  - (h) Compliance with the provisions of this article shall be prima facie evidence in any legal or equitable proceeding for damages caused by erosion or sedimentation that all requirements of law have been met and the complaining party must show negligence in order to recover any damages.
- (i) Any violations of any regulation or order of the board, any provision of its program, any condition of a permit, or any provision of this article shall be subject to a civil penalty. The civil penalty for any one violation shall be \$100.00, except that the civil penalty for commencement of land disturbing activities without an approved plan as provided in section 14-91 shall be \$1,000.00. Each day during which the violation is found to have existed shall constitute a separate offense. In no event shall a series of specified violations arising from the same operative set of facts result in civil penalties which exceed a total of \$3,000.00 except that a series of violations arising from the commencement of land disturbing activities without an approved plan for any site shall not result in civil penalties which exceed a total of \$10,000.00. Adoption of such an ordinance providing that violations are

- subject to a civil penalty shall be in lieu of criminal sanctions and shall preclude the prosecution of such violation as a misdemeanor under subsection (a) of this section.
- (i) Any person who violates any regulation or order of the board, any condition of a permit, any 3670 3671 provision of its program, or any provision of this article shall, upon a finding of an appropriate general district court, be assessed a civil penalty in accordance with the 3672 schedule. A civil action for such violation may be brought by the locality wherein the land 3673 3674 lies. In any trial for a scheduled violation, it shall be the burden of the locality to show the 3675 liability of the violator by a preponderance of the evidence. An admission or finding of 3676 liability shall not be a criminal conviction for any purpose. Any civil penalties assessed by a court shall be paid into the treasury of the locality wherein the land lies, except that where 3677 3678 the violator is the locality itself, or its agent, the court shall direct the penalty to be paid into 3679 the state treasury.
- 3680 (Code 1982, § 9-12; Ord. No. 718; Ord. No. 1530, 11-27-1995)
- 3681 State law reference—Penalties authorized, Code of Virginia, § 10.1-562 J.
- 3682 Secs. 14-100—14-126. Reserved.